

Backcountry Management Plan

D E N A L I

National Park and Preserve • Alaska

National Park Service
U.S. Department of Interior



SUMMARY

This *Final Backcountry Management Plan, General Management Plan Amendment, and Environmental Impact Statement* provides specific direction for backcountry management and guides backcountry management decisions for Denali National Park and Preserve for the next 20 years. Previous management plans did not adequately cover the extensive areas added to the park by the Alaska National Interest Lands Conservation Act of 1980 (ANILCA), nor did they address many of the current visitor experience, resource protection, and user conflict issues. The backcountry management plan describes how the National Park Service will act to provide future generations with a variety of opportunities to experience the park backcountry while protecting park wildlife and other natural resources, wilderness resource values, and subsistence resources. National Park Service actions are guided by established laws and policies, such as the National Park Service Organic Act, Mount McKinley National Park enabling legislation, the Wilderness Act, ANILCA, and National Park Service Management Policies. The plan also responds to public concerns identified during project scoping, public comments made during the National Environmental Policy Act (NEPA) review process, and the social and environmental impacts identified as part of NEPA review.

This document is a summary version of the *Final Backcountry Management Plan, General Management Plan Amendment, and Environmental Impact Statement* which was approved by a Record of Decision on February 21, 2006. Some references in the text require consultation with the complete document. A copy may be obtained by contacting the National Park Service at the following address:

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PURPOSE & NEED

Purpose of Plan

The goal of the backcountry management plan is to describe how the National Park Service will act to provide future generations with a variety of opportunities to experience the Denali backcountry while protecting park wildlife and other natural resources, wilderness resource values, and subsistence resources. This plan updates and expands the 1976 *Backcountry Management Plan* and, once approved by a Record of Decision, amends the 1986 *General Management Plan* for Denali National Park and Preserve. The 1997 *Entrance Area and Road Corridor Development Concept Plan* (DCP) and the 1997 *South Side Denali Development Concept Plan* also amended the 1986 *General Management Plan*. This plan also serves as a *Soundscape Preservation and Noise Management Plan* as required by NPS Director's Order 47, as a *Wilderness Management Plan* as required by NPS Director's Order 41 (see appendix B), and as a *Commercial Services Plan* for the backcountry.

This new plan addresses management of all park and preserve lands, except the park road corridor and adjacent development zones and backcountry day use areas, which were addressed in the 1997 *Entrance Area and Road Corridor Development Concept Plan*. The study area also includes the park road corridor west of park headquarters during the winter season. Some actions do affect the development and backcountry day use areas delineated in the 1997 *Entrance Area and Road Corridor Development Concept Plan*; the new actions proposed in this plan, however, are consistent with the *Entrance Area and Road Corridor DCP* and the *South Side Denali DCP*. The study area for this plan is shown in Map 1. The study area includes congressionally designated wilderness and lands determined suitable for wilderness designation.

The National Park Service prepared this environmental impact statement to evaluate the potential environmental impacts of the proposed backcountry management plan alternatives and to inform and seek input from the public, regulatory agencies, and other interested parties. The environmental impact statement findings and public comment also serves the basis for a decision by the NPS Regional Director for Alaska on the final *Backcountry Management Plan and General Management Plan Amendment*. Implementing the plan may require promulgation of special regulations and public advisories in consultation with other federal and state agencies and the public. This environmental impact statement was prepared according to the National Environmental Policy Act of 1969 and regulations of the Council on Environmental Quality (40 CFR Part 1500).

This amendment to the *General Management Plan* does not change the fundamental purposes of the park as established in law and policy. Throughout the history of the park, management decisions have been oriented to the preservation of wilderness character and other wilderness resource

values. There has also been an emphasis on protecting the park's intact natural ecosystem. This plan will retain that consistency in management but will introduce new ideas for addressing the issues of today and those anticipated in the next 20 years.

Need for a Plan

There are four reasons why a new backcountry management plan is needed at this time, identified as planning issues during project scoping.

1) The 1976 backcountry planning document predated ANILCA, and the 1986 GMP did not provide detailed guidance about managing backcountry uses in the park additions.

As a result, there is a well-defined system for managing backcountry use in the former Mount McKinley National Park (the Old Park), but only a small portion of the ANILCA park additions have been incorporated into that management framework. In addition, ANILCA designated most of the Old Park as wilderness under the Wilderness Act and included provisions for special access that have never been addressed in backcountry planning.

2) Visitation has grown dramatically for some backcountry activities, requiring new methods of management.

Since 1986, general growth in the tourism industry statewide has brought more pressure for comfortable, convenient, and predictable access to Alaska's wild lands. The resident population of Alaska has grown more than 50 percent since 1980, providing a much larger year-round demand for recreational opportunities on the public lands. Twenty years ago the relatively few recreational users of the public lands were sparsely spread over a vast area, but today—particularly in areas that are accessible from the state road system—the use is much more dense, creating concerns about damage to resources and generating conflicts among different user groups. For many locations and activities, the National Park Service has little information about the extent and character of use. Laws, regulations, and agency management policies require the National Park Service to manage recreational and other uses to protect resources and to minimize conflicts among park users.

Specific issues identified during scoping include the following:

Aircraft Overflights and Airplane Landings: Scenic air tours and concession-permitted airplane landings have increased dramatically since the 1986 GMP was completed. Helicopter and fixed-wing aircraft encounters are a common occurrence in all of the popular hiking areas, particularly south of the park road along the flank of the Alaska Range and in glaciated areas around Mount McKinley. Airplanes making landings on Alaska Range glaciers—once primarily a way to transport mountaineers—now account for almost 3,000 landings a year; and more than two-thirds of those landings are brief stops with scenic tour passengers.

Aircraft are an important means of visitor access to remote areas of the Denali backcountry, but overflights and landings, generally unrestricted by management plans in effect, have resulted in substantial changes in the natural sound environment and generated new conflicts with park users on the ground beneath flight corridors. Commercial jets traveling across the park, military flights in a Military Operations Area south of the Alaska Range, and NPS administrative use of aircraft also contribute to these issues.

Snowmachine (Snowmobile) Use: Recreational snowmachine use was very limited at the time of the 1986 GMP. Since then improved technology has extended the range of the machines and the terrain they are capable of traversing, so that snowmachine use is now widespread in the southern park additions and growing rapidly. Snowmachines can be an important means to access remote backcountry areas, but conflicts with other users, especially non-motorized winter recreationists and subsistence users, are increasing, and concerns have been raised about the effects of snowmachine use on wildlife, vegetation, water quality, air quality, natural soundscapes, and other park resources. There are currently few guidelines for managing use.

Hiking and Backpacking: The numbers of participants in backcountry park activities such as hiking are growing because of larger numbers of visitors. There are many more seasonal workers in the area who often use the park backcountry during their leisure time. Lodges in the Kantishna Hills are providing a much broader range of options for their guests than those available 15 years ago.

Climbing and Mountaineering: The number of climbers on Mount McKinley has doubled in the last 20 years. As climber numbers continue to rise, crowding on technical sections of popular routes, such as the fixed lines section of the West Buttress, could jeopardize visitor safety. Congestion at campsites also raises questions about the quality of the experience within this part of the Denali Wilderness, and the level of use has created a substantial human waste management concern. Several climbing areas in the park additions, such as Little Switzerland and the Eldridge Glacier, are becoming new popular destinations for climbers and mountaineers, leading to concerns about human waste and eventual crowding in those locations.

Guided and Commercial Uses: Increasing visitation has led to significant increases in demand by businesses and non-profit organizations to offer guided activities. The new Murie Science and Learning Center is bringing additional groups of visitors into the park for research and educational activities. The National Park Service has no management plan that describes the kind and level of guided and commercial uses appropriate in the Denali backcountry.



3) Anticipated increases in additional activities are expected in the next 20 years.

The National Park Service needs to act to anticipate changes in use. Off-road bicycle use, motor-boat access, and pack animal use are activities that presently occur at minimal levels, but for which interest could increase at any time just as interest in snowmachine use increased during the 1990s. Non-motorized winter recreational use (skiing, skijoring, snowshoeing, and dog mushing) has been modest, but also has potential for growth. This plan needs to provide guidance for managing these uses.

4) Changes in backcountry use require National Park Service action to protect park resources and wilderness character.

Underlying the need to manage visitor activities in the backcountry is the NPS responsibility to protect park resources and values. These include wildlife, vegetation, natural ecological relationships, natural sounds, and wilderness resource values. The changes in both visitor activities and administrative activities in the backcountry need to be managed to ensure these values are not compromised. Present plans do not adequately address these topics, particularly in the 1980 park additions and preserve, nor do they address resources that have only recently been identified as threatened, such as the park's natural soundscape.

Background

Congress designated the original Mount McKinley National Park and the larger Denali National Park and Preserve for specific purposes as described in law. The park was created by Congress because it had particular significance — qualities that make it a superlative example of the natural, cultural, and wilderness landscapes of the United States.

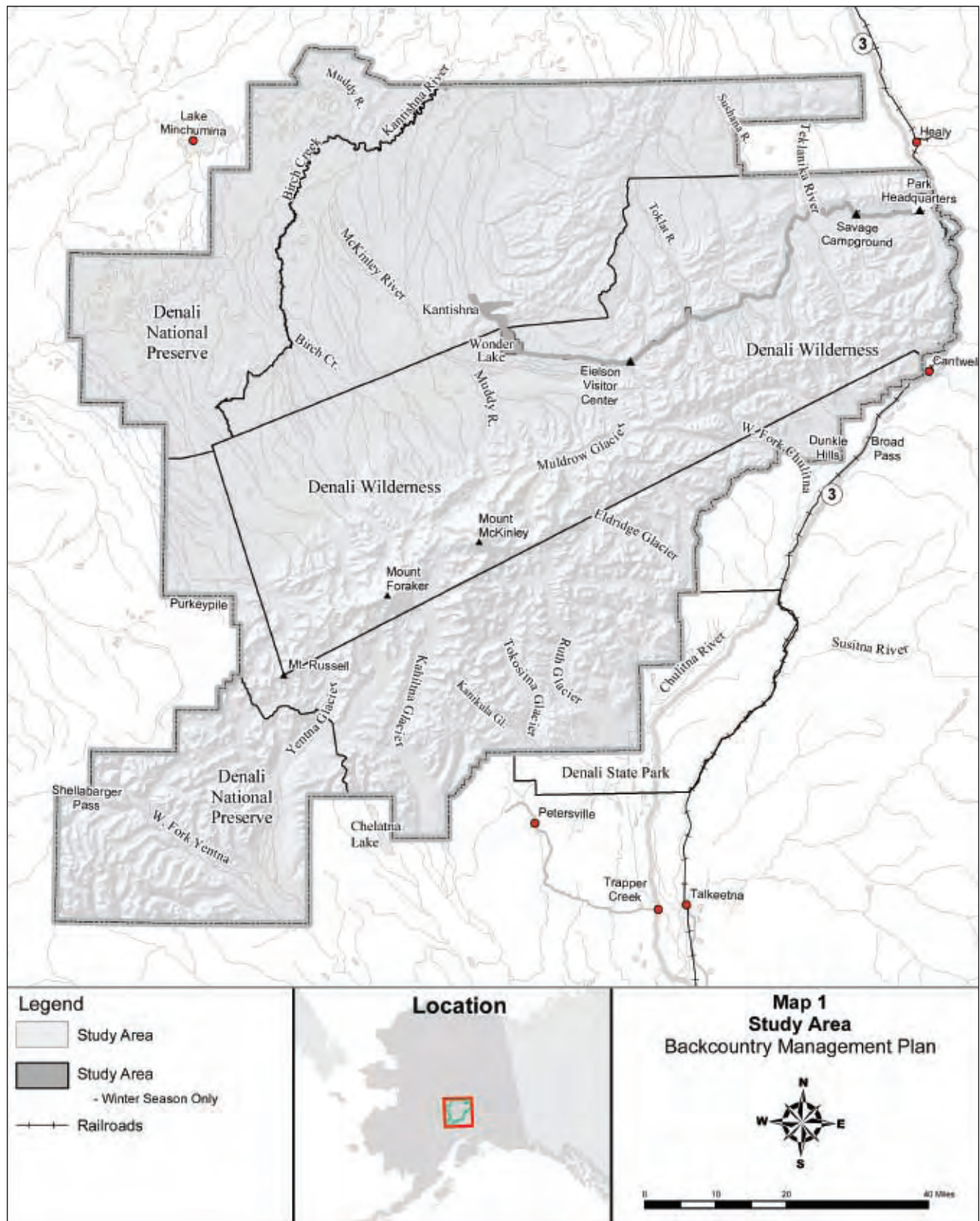
Park Purpose

The purpose of Denali National Park and Preserve has evolved from the time Congress established the original Mount McKinley National Park to the present and has increased in complexity because of the different mandates that apply to the Old Park (the original Mount McKinley National Park), the national park additions (added by ANILCA), the national preserve (also added by ANILCA), and the designated wilderness (covering most of the Old Park).

Mount McKinley National Park (Old Park)

In 1917 Congress established Mount McKinley National Park as a “game refuge” to “set apart as a public park for the benefit and enjoyment of the people...for recreation purposes by the public and for the preservation of animals, birds, and fish and for the preservation of the natural curiosities and scenic beauties thereof ...” (39 Stat. 938).

Map 1: Study Area



Denali National Park and Preserve

In 1980 Congress passed the Alaska National Interest Lands Conservation Act (ANILCA, 16 USC §§ 3101-3233, Pub. L. 96-487), which enlarged and renamed the park Denali National Park and Preserve. Section 101 of ANILCA describes the broad purposes of the new conservation system units throughout Alaska, including enlarged national parks and preserves such as Denali. These are the following:

- Preserve lands and waters for the benefit, use, education, and inspiration of present and future generations.
- Preserve unrivaled scenic and geological values associated with natural landscapes.
- Maintain sound populations of, and habitat for, wildlife species.
- Preserve extensive, unaltered ecosystems in their natural state.
- Protect resources related to subsistence needs.
- Protect historic and archeological sites.
- Preserve wilderness resource values and related recreational opportunities such as hiking, canoeing, fishing, and sport hunting.
- Maintain opportunities for scientific research in undisturbed ecosystems.
- Provide the opportunity for rural residents engaged in a subsistence way of life to continue to do so.

Section 202 stated that the Denali National Park and Preserve additions are to be managed for the following additional specific purposes:

- To protect and interpret the entire mountain massif and the additional scenic mountain peaks and formations.
- To protect habitat for, and populations of fish and wildlife, including, but not limited to, brown/grizzly bears, moose, caribou, Dall sheep, wolves, swans, and other waterfowl.
- To provide continued opportunities, including reasonable access, for mountain climbing, mountaineering, and other wilderness recreational activities.

Denali Wilderness

Section 701 of ANILCA designated the “Denali Wilderness of approximately one million nine hundred thousand acres” under the Wilderness Act as depicted on a map referenced in Section 202 of ANILCA and including 99% of the former Mt. McKinley National Park. According to the Wilderness Act, these lands are to be “administered for the use and enjoyment of the American people in such manner as will leave them unimpaired for future use and enjoyment as wilderness, and so as to provide for the protection of these areas, the preservation of their wilderness character, and for the gathering and dissemination of information regarding their use and enjoyment as wilderness.”

Denali National Preserve

Section 1313 of ANILCA addresses the purpose of national preserves created by the act.

A National Preserve in Alaska shall be administered and managed as a unit of the National Park System in the same manner as a national park except as otherwise provided in this Act and except that the taking of fish and wildlife for sport purposes and subsistence uses, and trapping shall be allowed in a national preserve under applicable State and Federal law and regulation.

Park Significance

Large Protected Area. Denali National Park and Preserve encompasses a vast six million acre area, about the size of the state of New Hampshire. Most of the two million acres of the original park has been in protected status since 1917. This large size enables a spectacular array of flora and fauna to live together in a healthy natural ecosystem and provides excellent opportunities to study subarctic ecosystems in settings largely undisturbed by humans. Because of these values, the United Nations Man and the Biosphere Program designated the park and preserve to be an International Biosphere Reserve.

Mountains and Glaciers. The park contains a major portion of the Alaska Range, one of the great mountain uplifts in North America. The Alaska Range is dominated by North America's highest peak, Mount McKinley, with its summit at 20,320 feet above sea level. Towering 18,000 feet above the adjacent lowlands, the mountain's dramatic vertical relief rivals any other mountain in the world, exceeding the vertical relief of Mount Everest measured from base to summit. A number of large glaciers originate in the park's high mountains, including some of the largest in North America.

Wildlife and Habitat. The park was originally established in 1917 as a refuge for large mammals. Backcountry visitors and visitors traveling along the park road often observe Dall sheep, caribou, wolf, grizzly bear, moose, and fox. While populations fluctuate, nowhere else in America can such concentrations of these large species of wildlife be observed in as accessible a natural setting. The park is also significant for its diverse avian habitat that attracts birds from all over the world. The park's rich and varied vegetation includes alpine tundra, shrub-scrub tundra, mixed spruce-birch and spruce-tamarack woodlands, taiga, wetlands, and extensive riparian and lowland forest areas. Denali has more than 10,000 mapped lakes. More than 753 species of flowering plants inhabit the slopes and valleys of the park.

Scenic Resources and Air Quality. Outstanding views of natural features, including mountains, glaciers, faults, and rivers dominate the park landscape. On a clear day, Mount McKinley can be seen from Anchorage, more than 130 air miles to the south. The exceptional air quality in Alaska and the lack of city lights near the park provide the conditions for outstanding daytime views year-round and excellent night sky visibility in fall, winter, and spring. Denali National Park and Preserve is a designated Class I airshed under the Clean Air Act Amendments.

Cultural Resources. There are 257 known cultural resource sites within Denali's boundaries, including both prehistoric and historic sites. Because cultural resource inventories have been limited to date, this number likely represents a small fraction of the park's total sites. Known resources include archeological and historic sites associated with Athabascan Indian groups, early explorers, mining history, and the early days of the park. Major prehistoric sites in the park include the Teklanika Archeological District, a property listed on the National Register of Historic Places. Many historic structures are in the park headquarters area, which is listed on the National Register of Historic Places as a district, and on the boundaries of the Denali Wilderness (along the original park boundary). These are mainly patrol cabins and other structures dating back to early years of park management. Historic mining activity dates back to the early 1900s in the Kantishna Hills (which includes the national register-eligible Kantishna Historic District), the Stampede area, and the Dunkle Hills near Cantwell.

Mountaineering. Because it is the highest peak in North America, has a high northern latitude location, and is relatively accessible, Mount McKinley is considered one of the world's premier mountaineering destinations, drawing climbers from many countries. It is touted as one of the "seven summits of the world." Many other peaks in the park, including Mount Foraker, also offer outstanding expeditionary climbing opportunities.

Wilderness Recreation. Denali offers superlative opportunities for primitive wilderness recreation. Outstanding cross-country hiking, backcountry camping, and winter touring possibilities are available for those willing to approach the area in its natural condition. This huge park contains large areas with almost no trails and where evidence of human use is minimal to nonexistent. These conditions are in contrast to most wilderness areas in the contiguous 48 states where maintained trails, designated campsites, footbridges, and signs are standard. These conditions also contrast with much of Alaska, where similar opportunities abound, but are very difficult to reach. A large portion of Denali's backcountry is readily accessible to visitors who can reach the park by either highway or railroad from either Anchorage or Fairbanks—Alaska's two cities and major connection points for out-of-state visitors.

Management Goals

General Vision

The National Park Service will preserve outstanding opportunities to view wildlife and mountain scenery, to experience wilderness, and to study wildlife, habitat, and ecosystem patterns and processes in the backcountry of Denali National Park and Preserve. Denali will retain its unique status as a park that offers an undeveloped Alaskan wilderness park experience distinct from the wilderness and park experience in the other states, while being more accessible than most national parks in Alaska because of the adjacent highway system and interior park road. In order to preserve the park's character and unique recreational opportunities, the National Park Service will seek to provide recreational opportunities in the Denali backcountry that are compatible with the unique resources and values for which the park was established. Other recreational activities can occur on adjacent lands that possess excellent wildland qualities but also have broader management mandates that are more appropriate for some uses.



Objectives

Specifically, actions described by this plan should

- protect and preserve the park's natural and cultural resources, including natural soundscapes and subsistence opportunities;
- protect and preserve the park's wilderness resource values, including its wilderness character and outstanding opportunities for solitude;
- provide for the public's freedom of use and enjoyment of the park's backcountry and wilderness in a manner that is consistent with park purposes and the protection of park resources and values;
- protect and provide opportunities for wilderness recreational activities in the backcountry, including reasonable access; these recreational opportunities should be defined within the context of a spectrum of recreational opportunities available on lands managed by public agencies in the Denali region (primarily state parks, other state lands, and federal Bureau of Land Management lands);
- ensure all National Park Service management practices and research activities in the backcountry are consistent with park purposes; and
- provide for the means to achieve public understanding and support of backcountry and wilderness values.

Applicable Laws, Regulations, and Policies

Management of Denali National Park and Preserve's backcountry must be consistent with the laws, regulations, policies, and plans of the federal government. The legal and policy framework that governs management of Denali is extensive; the following information summarizes the most important directives organized around categories of major actions. The directives are categorized as follows:

- **Statute (law, legislation):** These are the laws passed by Congress that provide the overriding direction for the management of national parklands and give the National Park Service its authority for management action. Citations may be found at <http://www4.law.cornell.edu/uscode/> or <http://uscode.house.gov/>.
- **Regulation:** Compiled in the Code of Federal Regulations (CFR), regulations are promulgated by the executive branch to interpret statutes. Citations may be found at <http://www.gpoaccess.gov/cfr/index.html>.
- **Case Law:** Disputes over the interpretation of law are resolved by administrative bodies, such as the Department of Interior's Office of Hearing and Appeals, and by the federal court system. Such interpretations then govern within the area of the court or administrative body's jurisdiction.
- **Executive Orders:** Executive Orders are instructions by the president to the federal agencies for carrying out their work. Citations may be found at <http://data2.itc.nps.gov/npspolicy/getEOs.cfm>.
- **NPS Management Policies:** Management Policies translate directives and guidance, including the Constitution, public laws, executive proclamations and orders, and regulations, into cohesive directions. They are published approximately every 10 years and apply servicerwide. An electronic file of the current Management Policies is found at <http://data2.itc.nps.gov/npspolicy/index.cfm>.

- **NPS Director's Orders:** If and when it is necessary, Management Policies may be modified or supplemented by Director's Orders. These orders articulate new or revised policy on an interim basis between publication dates of NPS Management Policies. They also provide more detailed interpretation of Management Policies and outline requirements applicable to NPS functions and responsibilities. Full text files of the Director's Orders are found at <http://data2.itc.nps.gov/npspolicy/DOrders.cfm>.
- **Park-specific Directives:** Park-specific instructions, procedures, directives and other guidance supplemental to and in conformance with applicable NPS policies and regulations (such as hours of operation, the dates of seasonal openings, or procedures for implementing servicewide policies) may be set by superintendents within formal delegations of authority from regional directors. Denali's directives related to backcountry management are found primarily within park planning documents, particularly the 1986 General Management Plan and the 1976 Backcountry Management Plan, and within the annual Superintendent's Compendium. These documents can be found at <http://www.nps.gov/dena/pphtml/documents.html>

Authority for the General Management Plan Amendment and EIS Process National Parks and Recreation Act of 1978 (NPRA, 16 USC § 1 note, 92 Stat. 3467)

NPRA requires the National Park Service to prepare and revise general management plans in a timely manner for each unit. A general management plan or amendments must include resource protection measures; general development locations, timing, and costs; carrying capacity analyses; and boundary modifications.

National Environmental Policy Act of 1969 (NEPA, 42 USC §§ 4321-4370d)

NEPA mandates that any federal project or any project that requires federal involvement be scrutinized for its impact on the natural and human environment and that reasonable alternatives for accomplishing the project purpose be considered. The purpose of NEPA is to help public officials make well-informed decisions that are based on an objective understanding of environmental consequences for any federal action with potentially major impacts. To ensure compliance with NEPA, a specified process for proposed projects must be followed. The steps in this process are:

- 1) Scoping
- 2) Draft Environmental Impact Statement (EIS)
- 3) Public Review of the Draft EIS
- 4) Final Environmental Impact Statement and Record of Decision

NPS Management Policies Chapter 2.

This chapter specifies that the National Park Service will maintain an updated General Management Plan for each unit of the national park system and review, amend, or revise the plans every 10-15 years or sooner if conditions change rapidly. Important guidance for this plan includes mandates for management zoning, public involvement, cooperative regional planning, and the examination of alternative futures.

General Direction for Public Enjoyment and Resource Protection

The National Park Service Organic Act of 1916 (16 USC §§ 1-4, 39 Stat. 535)

The Organic Act establishes the National Park Service and directs the agency to

...promote and regulate the use of the Federal areas known as national parks, monuments, and reservations... by such means and measures as conform to the fundamental purpose of the said parks, monuments and reservations, which purpose is to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.

Importantly for all planning processes in the park system, the Organic Act provides a fundamental standard for management—that park resources should remain “unimpaired” for the enjoyment of future generations.

Redwood National Park Expansion Act of 1978 (16 USC §§ 1-1a, 92 Statute 166)

The Redwoods Act amends the Organic Act and clarifies the importance Congress placed on protecting park resources such that:

The authorization of activities shall be construed and the protection, management, and administration of these areas shall be conducted in light of the high public value and integrity of the National Park System and shall not be exercised in derogation of the values and purposes for which these various areas have been established, except as may have been or shall be directly and specifically provided by Congress.

NPS Management Policies Section 1.4.

The NPS Management Policies use the terms “resources” and “values” to mean the full spectrum of attributes for which a park unit is established and managed, including the Organic Act’s fundamental purpose and any additional purposes as stated in a park unit’s establishing legislation. The impairment of park resources and values may not be allowed unless directly and specifically provided by statute. The primary responsibility of the National Park Service is to ensure that park resources and values will continue to exist in a condition that will allow the American people to have present and future opportunities to enjoy them.

The evaluation of whether impacts of a proposed action would lead to impairment of park resources and values is included in the environmental consequences chapter of this document. Impairment is more likely when there are potential impacts to a resource or value whose conservation is

- necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park;
- key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park; or
- identified as a goal in the park’s general management plan or other relevant NPS planning documents.

NPS Management Policies Chapter 8.

The NPS management policies address recreational activities in general and backcountry uses in particular in sections 8.1 and 8.2. To provide for enjoyment of the parks, the National Park Service will encourage visitor activities that

- are appropriate to the purpose for which the park was established; and
- are inspirational, educational, or healthful, and otherwise appropriate to the park environment; and
- will foster an understanding of, and appreciation for, park resources and values, or will promote enjoyment through a direct association with, interaction with, or relation to park resources; and
- can be sustained without causing unacceptable impacts to park resources or values.

Unless mandated by statute, the service will not allow visitors to conduct activities that

- would impair park resources or values;
- create an unsafe or unhealthful environment for other visitors or employees;
- are contrary to the purposes for which the park was established; or
- unreasonably interfere with
 - the atmosphere of peace and tranquility, or the natural soundscape maintained in wilderness and natural, historic, or commemorative locations in the park;
 - NPS interpretive, visitor service, administrative, or other activities;
 - NPS concessioner or contractor operations or services; or
 - other existing, appropriate park uses.

Case Law.

Wilkins v Department of the Interior, 995 F.2d 850, 853 (8th Cir. 1993)

New Mexico State Game Commission v Udall, 410 F.2d 1197 (10th Cir. 1969)

These two cases demonstrate that the NPS need not wait for actual damage to occur before taking protective action to prevent degradation to wildlife and other natural resources. They were fundamental in the environmental assessment evaluating closure of the Old Park to snowmachine use (NPS 2000).

Mount McKinley National Park Backcountry Management Plan (NPS 1976).

Increased visitation from increased access due to the opening of the George Parks Highway during the 1970s prompted Mount McKinley National Park to introduce use limits in 1974 and establish a quota system with the park's 1976 *Backcountry Management Plan*. The plan outlined use limits for designated units in the backcountry and institutionalized the concepts of dispersed use and self-reliance. Implicit to the visitor experience in the backcountry of Mount McKinley National Park was the "overpowering feeling of wilderness" as articulated in later plans.

Management Areas

NPS Management Policies Section 2.3.1.3.

Management policies specify that GMPs provide for management zoning to illustrate where there are differences in intended resource conditions, visitor experience, and management activity.

NPS Management Policies Section 8.2.1.

Management policies also specify that to determine carrying capacity (as required by NPRA), “the decision-making process should be based on desired resource conditions and visitor experiences for the area; quality indicators and standards that define the desired resource conditions and visitor experiences; and other factors that will lead to logical conclusions and the protection of park resources and values.” Appendix H of the original *Draft EIS* provided detailed information about NPS visitor carrying capacity decision making, including the use of the Visitor Experience and Resource Protection process (NPS 2003d).

NPS Management Policies Section 4.9.

The policy requires that the National Park Service will preserve, to the greatest extent possible, the natural soundscapes of parks. It requires the NPS to restore degraded soundscapes to the natural condition wherever possible, and to protect natural soundscapes from degradation due to noise (undesirable human-caused sound). The service is mandated to take action to prevent or minimize all noise that, through frequency, magnitude, or duration, adversely affects the natural soundscape or other park resources or values, or that exceeds levels that have been identified as being acceptable to, or appropriate for, visitor uses at the sites being monitored.



Director's Order 47, Soundscape Preservation and Noise Management.

This directive establishes that natural sounds are intrinsic elements of the environment, and states that the National Park Service considers natural sounds an inherent component of “the scenery and the natural and historic objects and the wild life...” protected by the Organic Act. Park managers are directed to preserve natural soundscapes and to eliminate, mitigate, or minimize inappropriate noise sources through the NPS planning processes, such as general management plans and amendments. Park plans will address:

- 1) the baseline natural ambient sound environment in qualitative and quantitative terms;
- 2) identify sound sources and sound levels consistent with park legislation and purposes;
- 3) identify the level, nature, and origin of internal and external noise sources;
- 4) articulate desired future soundscape conditions; and
- 5) recommend approaches or actions to achieve those conditions or otherwise mitigate noise impacts.

1986 General Management Plan.

The General Management Plan for Denali National Park and Preserve zoned all of the park and preserve into one of four designations: Natural Zone, Historic Zone, Park Development Zone, and Special Use Zone. The 1997 *Entrance Area and Road Corridor Development Concept Plan (DCP)* further classified the Park Development Zone into several subzones. The Special Use Zone applied only to private inholdings within park boundaries, and has diminished in size as the NPS has purchased mining properties in the Kantishna Hills. This classification still applies to the remaining privately held properties throughout the park and preserve. The Historic Zone remains as specified in the GMP. The action alternatives of this backcountry management plan propose subdividing the Natural Zone into more specific classifications much as the *Entrance Area and Road Corridor DCP* subdivided the Park Development Zone.



Access

ANILCA Section 811 [16 USC § 3121(b)].

This section provides for continued access to public lands for subsistence use. Specifically, it states that “...rural residents engaged in subsistence uses shall have reasonable access to subsistence resources on public lands” and “...the Secretary shall permit on the public lands appropriate use for subsistence purposes of snowmachines, motorboats and other means of surface transportation traditionally employed for such purposes by local residents, subject to reasonable regulations.”

ANILCA Section 1110 [16 USC § 3170(a)].

This section provides for special access and access to inholdings. Of particular interest to this plan are the provisions for special access—including motorized access—across public lands that are not generally allowed in national parks or wilderness areas outside of Alaska. Subsection (a) reads in part:

Notwithstanding any other provision of this Act or other law, the Secretary shall permit...the use of snowmachines (during periods of adequate snow cover, or frozen river conditions in the case of wild and scenic rivers), motorboats, airplanes, and non-motorized surface transportation methods for traditional activities (where such activities are permitted by this Act or other law) and for travel to and from villages and homesites. Such use shall be subject to reasonable regulations by the Secretary to protect the natural and other values of the conservation system units...and shall not be prohibited unless, after notice and hearing in the vicinity of the affected unit or area, the Secretary finds such uses would be detrimental to the resource values of the unit or area.

Airplane Access

National Parks Overflights Act (16 USC § 1a-1 note, 100 Stat. 91).

In 1987 the U.S. Congress enacted the National Parks Overflights Act, which called for the National Park Service to recommend to the Federal Aviation Administration (FAA) actions for the substantial restoration of natural sounds to Grand Canyon National Park. It also required the National Park Service to report to Congress on the nature of the overflight problem and its effects on park units. In 1995 the National Park Service presented the Report on *Effects of Aircraft Overflights on the National Park System* (NPS 1995b), which recommended that the National Park Service use the following methods when resolving airspace issues over national parks:

- Work with the FAA and with air tour operators to develop voluntary agreements to reduce noise over parks.
- Develop incentives to encourage air tour operators to replace equipment with quieter aircraft.
- Develop flight-free zones and flight corridors over parks.
- Create minimum altitude restrictions.
- Encourage the FAA to require operators to conform to certain operational requirements such as using quieter aircraft.
- Treat all commercial services provided to visitors in parks as concessions, which ensures services will conform to minimum standards, are not priced unreasonably, and are consistent with park values.
- Develop noise budgets at landing areas, landing strips, and airports to allot responsibility for and control of noise among operators.
- Limit times of operations and notify visitors of the best times to experience natural sounds.

43 CFR § 36.11.

This regulation implements the “special access” provisions of ANILCA 1110(a) and provides that “Fixed-wing aircraft may be landed and operated on lands and waters within areas, except where such use is prohibited or otherwise restricted by the appropriate Federal agency, including closures or restrictions pursuant to the closures of paragraph (h) of this section.” This direction is an exception to the regulations at 36 CFR § 2.17 that generally prohibit aircraft landings in national parks except by special regulation. However, helicopter landings are prohibited unless a special use permit is issued for that purpose.

FAA Advisory Circular 91-36C, Visual Flight Rules, Flight Near Noise-Sensitive Areas.

In addition to the 500-foot above-ground-level (AGL) guideline for surfaces around non-congested areas (FAA 2000a), this circular identifies 2,000 feet AGL as the minimum recommended altitude for overflights of noise sensitive areas, including units of the national park system. The suggested altitude minimums have been printed on the sectional aeronautical charts (scale 1:500,000) since the mid-1970s. The National Park Service recognizes that lower altitudes may be required at times because of weather conditions and emergencies (NPS 1986 GMP).

NPS Management Policies Section 8.4.

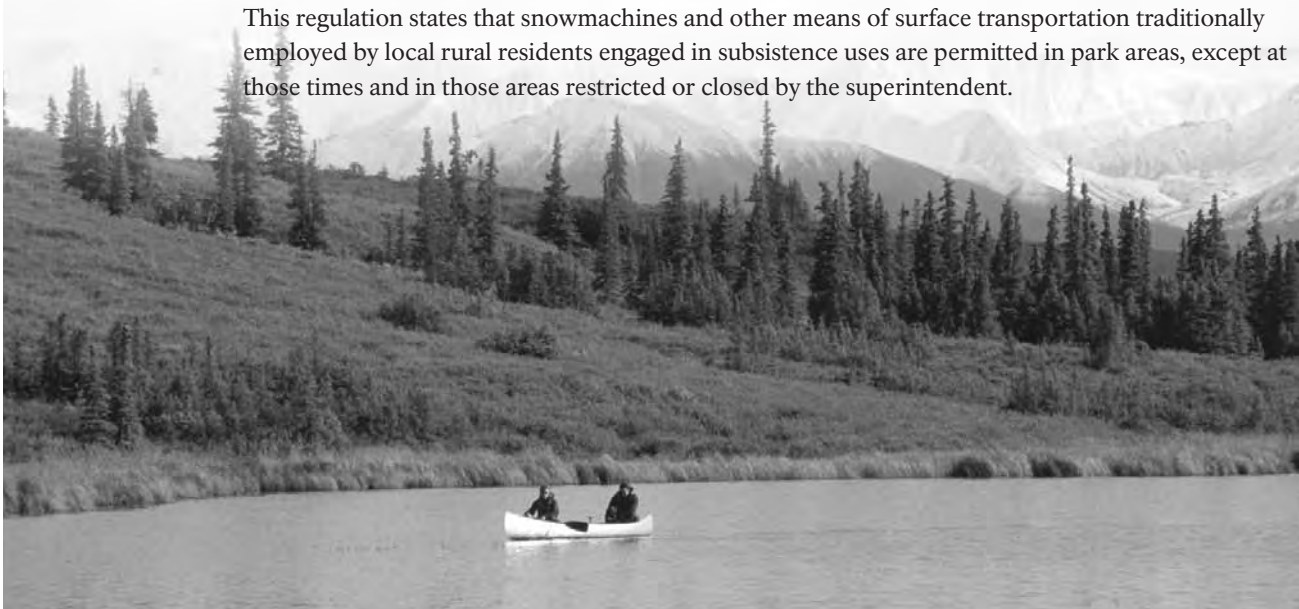
The National Park Service will monitor the effects of aircraft overflights on park resources and values and visitor enjoyment. Because the National Park Service has no direct authority or jurisdiction over airspace above parks, it will actively seek the assistance of the Federal Aviation Administration and Department of Defense to resolve overflight concerns.

Snowmachine Access**36 CFR § 2.18.**

This regulation generally prohibits snowmachine use in national parks, except on routes and water surfaces designated by special regulations. In Alaska, however, two snowmachine access regulations provide for exceptions: 36 CFR 13.46(a) and 43 CFR 36.11(c). The rules in 36 CFR 2.18 continue to regulate snowmachine speed limits, noise, headlights and taillights, brakes, and minimum age necessary for operating a snowmachine. This section also adopts state regulations for snowmachines.

36 CFR § 13.46(a).

This regulation states that snowmachines and other means of surface transportation traditionally employed by local rural residents engaged in subsistence uses are permitted in park areas, except at those times and in those areas restricted or closed by the superintendent.



43 CFR § 36.11(c).

This regulation allows the use of snowmachines (during periods of adequate snow cover and frozen river conditions) for traditional activities (where such activities are permitted by ANILCA or other law) and for travel to and from villages and homesites and other valid occupancies, except where such use is prohibited or otherwise restricted.

36 CFR § 13.63(h).

This special regulation addresses snowmachine operations specifically in Denali National Park and Preserve. It (a) defines a “traditional activity” in the former Mount McKinley National Park (Old Park) and (b) prohibits the use of snowmachines in the Old Park. Part (1) of subsection 13.63(h) defines the term “traditional activity” for the Old Park pursuant to ANILCA Section 1110(a) as follows:

A traditional activity is an activity that generally and lawfully occurred in the Old Park contemporaneously with the enactment of ANILCA, and was associated with the Old Park, or a discrete portion thereof, involving the consumptive use of one or more natural resources of the Old Park, such as hunting, trapping, fishing, berry picking or similar activities. Recreational use of snowmachines was not a traditional activity. If a traditional activity generally occurred only in a particular area of the Old Park, it would be considered a traditional activity only in the area where it had previously occurred. In addition, a traditional activity must be a legally permissible activity in the Old Park. (36 CFR § 13.63 (h)(1))

State of Alaska Snowmachine Laws

The National Park Service enforces State of Alaska snowmachine laws on lands under NPS jurisdiction, including requirements for safety equipment, licensing, and registration.

Off-road Vehicle Access**Executive Order 11644, Use of Off-Road Vehicles on Public Lands.**

Section 3 of this Executive Order directed federal land management agencies to promulgate regulations on the designation of routes and areas for ORV use. This section requires that designation take place as a special park regulation and establishes criteria that the agency must consider when designating routes and areas. These considerations include soil, watershed, vegetation damage; wildlife harassment or wildlife habitat disturbance; and potential user conflicts. The Executive Order also states that ORV use in national park system areas is permitted only upon a determination that such use would not adversely affect the natural, aesthetic, or scenic values of the area. Both this order and the Wilderness Act prohibit the use of ORVs in designated wilderness. The National Park Service implemented this Executive Order’s directive in 36 CFR § 4.10.

43 CFR § 36.11(g).

In addition to the process outlined by Executive Order 11644, this regulation provides that permits could be issued for ORV access on existing ORV trails if not in designated wilderness and if a finding shows that such access would be compatible with purposes and values for which the area was established.

Boating and Water Use Activities**43 CFR § 36.11(d).**

This regulation allows motorboat use on all area waters, except where such uses are prohibited or otherwise restricted in accordance with the procedures of 43 CFR 36.11(h). However, the use of personal watercraft (PWC) is prohibited, except where such use is designated by regulations at 36 CFR § 3.24. No NPS areas in Alaska are designated for such use.

Non-Motorized Surface Transportation**43 CFR § 36.11(e).**

The regulation at 43 CFR § 36.11(e) allows non-motorized surface transportation, such as dog teams, horses, and other pack or saddle animals on federal lands in Alaska, except where such use is prohibited or otherwise restricted in accordance with the procedures of 43 CFR § 36.11(h). Pack animals that have traditionally been used for transportation in support of subsistence activities would be allowed under 36 CFR § 13.46(a).

Closures and Public Use Limits**36 CFR § 1.5.**

This regulation provides authority for the park superintendent to close or restrict all or some public use or activities in an area. The use of permit, registration, or reservation systems can be employed as a tool for accomplishing the public use limits. The superintendent must make a determination that such action is necessary “for the maintenance of public health and safety, protection of environmental or scenic values, protection of natural or cultural resources, aid to scientific research, implementation of management responsibilities, equitable allocation and use of facilities, or the avoidance of conflict among visitor use activities” and must explain why less restrictive measures would not suffice. The regulation at 36 CFR §13.30 provides guidance for restrictions and closures for specific activities identified in Part 13 for national park units in Alaska, and 43 CFR §36.11(h) provides guidance for restrictions and closures to special access under ANILCA 1110(a).

43 CFR § 36.11(h).

This paragraph provides procedures for temporary or permanent closures to special access authorized under ANILCA 1110(a). The NPS “may close an area on a temporary or permanent basis to the use of aircraft, snowmachines, motorboats or non-motorized surface transportation only upon a finding by the agency that such use would be detrimental to the resource values of the area.” This paragraph also allows the agency to restrict or limit uses of an area under other statutory authority.

Wilderness Management**The Wilderness Act of 1964 (16 USC §§ 1131-1136, 78 Stat. 890).**

The 1964 Wilderness Act established the National Wilderness Preservation System and identified the National Park Service as one of the four federal agencies responsible for protecting and preserving the nation’s wilderness resource. The Wilderness Act defines wilderness as follows:

A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain. An area of wilderness is further defined to mean in this chapter an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which

- 1) generally appears to have been affected primarily by the forces of nature, with the imprint of man’s work substantially unnoticeable;*
- 2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation;*
- 3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and*
- 4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value.*

The Wilderness Act prohibits construction of roads or structures and the use of motorized equipment and mechanical transport in designated wilderness areas, but provides for exceptions for certain administrative activities through a “minimum requirement” process.

Alaska National Interest Lands Conservation Act of 1980 (ANILCA, 16 USC §§ 3101-3233).
ANILCA provides guidance about wilderness management at Denali.

- ANILCA Section 101 lists “preserve wilderness resource values” as a fundamental purpose of ANILCA.
- ANILCA Section 102(13), states that the term “wilderness” as used in ANILCA has the same definition as in the Wilderness Act.
- ANILCA Section 203(a) states that a fundamental purpose of the Denali park and preserve additions is to provide continued opportunities, including reasonable access, for wilderness recreational activities.
- ANILCA Section 1317 requires a wilderness suitability review and wilderness recommendations regarding the park additions and preserve lands added to Denali by ANILCA.

In addition, ANILCA provides some exceptions to national park and wilderness management practice that are detailed under the sections “Access,” described above, and “Facilities,” described below.

NPS Management Policies, Chapter 6.

Section 6.3.1 establishes that suitable and proposed wilderness on NPS lands should be managed under wilderness policy.

For the purposes of applying NPS wilderness policies, the term ‘wilderness’ includes the categories of suitable, study, proposed, recommended and designated wilderness. NPS wilderness policies apply regardless of category. . . In addition to managing these classified areas for the preservation of their wilderness values, planning for these areas must ensure that the wilderness character is likewise preserved...The National Park Service will take no action that would diminish the wilderness suitability of an area possessing wilderness characteristics until the legislative process of wilderness designation has been completed. Until that time, management decisions pertaining to lands qualifying as wilderness will be made in expectation of eventual wilderness designation.

1986 General Management Plan.

The 1986 GMP partially implemented the mandate of ANILCA Section 1317 by completing a wilderness suitability review of the Denali park additions and preserve. The review concluded that about 3.73 million acres of the park additions and preserve were suitable for wilderness designation, meaning that 99% of the entire park and preserve is either designated or suitable for designation as wilderness. The GMP concluded that “All lands determined suitable for wilderness designation will be managed under the terms of ANILCA to maintain the wilderness character and values of the lands until designation recommendations have been proposed and Congress has acted on these proposals.”

Denali National Park and Preserve Wilderness EIS (NPS 1988b).

The park's wilderness EIS described the status of designated, suitable, NPS proposed and recommended wilderness. The National Park Service proposed recommending to Congress all of the park additions, except former mining districts in the Kantishna Hills and Dunkle Hills, and a few other areas along the south boundary and north of the Wolf Townships along the northeast boundary. None of the preserve areas was proposed for wilderness designation. This proposal was not forwarded by the secretary of interior to the president for a recommendation to Congress.

Map 3-1 in the *Revised Draft EIS* shows designated wilderness and areas determined suitable for wilderness designation at Denali.

Commercial Services**National Park Service Concessions Management Improvement Act of 1998 (Pub. L. 105-391, codified at scattered sections in the U.S. Code).**

This act provides the requirements under which commercial visitor services are authorized in units of the national park system. Section 402(b) provides:

It is the policy of the Congress that development of public accommodations, facilities and services in units of the National Park System shall be limited to those accommodations, facilities and services that

- 1) are necessary and appropriate for public use and enjoyment of the unit of the national park system in which they are located; and*
- 2) are consistent to the highest practicable degree with the preservation and conservation of the resources and values of the unit.*

Wilderness Act (16 USC §§ 1131-1136, 78 Stat. 890).

The Wilderness Act provides two pieces of guidance related to commercial activities in wilderness.

- Section 4(c): "Except as specifically provided for in this Act, and subject to existing private rights, there shall be no commercial enterprise...within any wilderness area...."
- Section 6: "Commercial services may be performed within the wilderness areas designated by this Act to the extent necessary for activities which are proper for realizing the recreational or other wilderness purposes of the area."

NPS Management Policies, Chapter 6.

Management policies on wilderness clarify the Wilderness Act for management of commercial services on wilderness lands managed by the National Park Service. Section 6.4.4 directs the following:

Wilderness-oriented commercial services that contribute to public education and visitor enjoyment of wilderness values or provide opportunities for primitive and unconfined types of recreation may be authorized if they meet the "necessary and appropriate" tests of the National Park Service Concessions Management Improvement Act of 1998 and section 4(d)(6) of the Wilderness Act (16 U.S.C §§ 1133(d)(5)), and if they are consistent with the wilderness management objectives contained in the park's wilderness management plan, including the application of the minimum requirement concept.

NPS Management Policies, Chapter 10.

These policies address commercial visitor services authorized either through concession contracts or commercial use authorizations. Section 10.2.2 specifies that commercial services planning will identify the appropriate role of commercial operations in helping parks to achieve desired visitor experiences. A decision to authorize a concession must be based on a determination that the facility or service

- is necessary and appropriate for public use and enjoyment and cannot be met outside of park boundaries;
- will be provided in a manner that furthers protection, conservation, and preservation of the environment; and
- will enhance visitor use and enjoyment of the park without causing unacceptable impacts to park resources or values.

Alaska National Interest Lands Conservation Act (ANILCA, 16 USC §§ 3101-3233).

Section 1307(a) provides for persons who were adequately providing visitor services in areas incorporated into conservation system units as of January 1, 1979 to continue doing so, assuming such services are compatible with the purposes of the area and the service is adequately provided. Section 1307(b) provides preference for visitor service contracts to most affected Native Corporations and to local residents, except for sport fishing and hunting guiding activities.



Facilities

NPS Management Policies Chapter 9.

The National Park Service will provide visitor and administrative facilities that are necessary, appropriate, and consistent with the conservation of park resources and values and will avoid the construction of buildings, roads, and other development that will cause unacceptable impacts on park resources and values. The policy provides parameters for constructing trails and backcountry campsites.

Wilderness Act (16 USC §§ 1131-1136, 78 Stat. 890).

Structures and installations are generally not permitted in designated wilderness, although there are exceptions for cultural and historic resources and certain administrative purposes.

Alaska National Interest Lands Conservation Act (ANILCA, 16 USC §§ 3101-3233)

- Section 1306 provides for the establishment of visitor facilities and administrative sites within conservation system units if compatible with the purposes for which the unit is established, expanded or designated, or other provisions of the act. It also allows for construction of such facilities outside the boundaries of the unit, with a preference for locating such sites and facilities on Native lands in the vicinity.
- Section 1310 allows for the establishment of navigation facilities or facilities for weather, climate, and fisheries research and monitoring.
- Section 1315(d) authorizes the construction of new public use cabins in designated wilderness “if such cabins and shelters are necessary for the protection of public health and safety.”
- Section 1316 authorizes the continuation and new establishment of temporary campsites, tent platforms, shelters, and other temporary facilities and equipment that are directly and necessarily related to the taking of fish and wildlife where those activities are allowed. The secretary may deny such use if it is determined that the use would be detrimental to the purposes for which the conservation system unit was established, including the wilderness character of any wilderness area within a unit.



Denali South Side Development Concept Plan/EIS (NPS 1997a).

This EIS evaluated the impacts of a proposed action and range of alternatives to phase in the development of visitor facilities and services on the south side of the Alaska Range. The final plan was a result of cooperative regional planning by the NPS, State of Alaska, Denali Borough, Matanuska-Susitna Borough, and two Native regional corporations (Ahtna, Inc., and Cook Inlet Region, Inc.). The plan included several backcountry facilities including:

- Five primitive fly-in campsites and up to two public-use cabins at Chelatna Lake.
- Four public-use cabins to be built on state land in the Tokositna area.
- Public access from the Dunkle Hills Road.
- A trail from a new visitor center on the Petersville Road to the park boundary.

The National Park Service is presently developing an implementation plan for portions of the *South Side Denali DCP* in conjunction with its partners, the State of Alaska and the Matanuska-Susitna Borough, but only the last of the items listed above will be addressed in this phase of implementation.

Denali Entrance Area and Road Corridor Development Concept Plan/EIS (NPS 1997b)

This plan addressed visitor use, resource protection, and related facility development in the “frontcountry” of Denali National Park and Preserve. The frontcountry includes all non-wilderness areas along the George Parks Highway, the Alaska Railroad, the entrance and headquarters areas, and the Denali Park Road corridor to the Kantishna airstrip. This plan included several backcountry facilities, including:

- Up to 10 walk-in campsites in the vicinity of Kantishna.
- Several hiking trails from the park road and the Parks Highway, including an upgraded Triple Lakes Trail and new trails on Thorofare Ridge from Eielson, Savage River, and between the Savage River Bridge and Savage Campground.

Americans with Disabilities Act

(Pub. L. 101-336, 104 Stat. 327, codified at scattered sections in the U.S. Code).

The following language describes the relationship between ADA and the Wilderness Act:

Congress reaffirms that nothing in the Wilderness Act is to be construed as prohibiting the use of a wheelchair, and consistent with the Wilderness Act no agency is required to provide any form of special treatment or accommodation, or to construct any facilities or modify conditions of lands within a wilderness area to facilitate such use. The term wheelchair means a device designed solely for the use by a mobility-impaired person for locomotion that is suitable for use in an indoor pedestrian area. (Section 507c).

Wheelchairs that meet this definition are allowed in the backcountry of Denali National Park and Preserve.



Administrative and Scientific Activities

Wilderness Act (16 USC §§ 1131-1136, 78 Stat. 890).

The Wilderness Act provided that administrative activities in wilderness must meet a “minimum requirement” test in order to be excepted from general prohibitions on temporary roads, use of motorized equipment and motorized or mechanized transportation, landing of aircraft, and structures or installations.

NPS Management Policies 8.4.

Official NPS use of aircraft in and over parks will be limited to flights needed to support or carry out emergency operations or essential management activities where no practical alternative methods of access exist. National Park Service uses of aircraft will be planned and scheduled to minimize adverse impacts on park resources and values and visitor enjoyment.

Easements and Boundary Changes

National Parks and Recreation Act of 1978 (NPRA) (NPRA, 16 USC § 1 note, 92 Stat. 3467).

The NPRA requires that general management plans for national parks consider boundary changes.

Alaska Native Claims Settlement Act, Section 17(b) [43 USC § 1616(b)].

Section 17(b) provides for the reservation of public access easements across Native corporation lands within or adjoining park and preserve lands. The purpose of these easements is to provide access from public lands and waters across the private lands to other public lands and waters. The National Park Service is responsible for managing these public access easements inside the park unit and for those assigned to the National Park Service outside of the park.

Alaska National Interest Lands Conservation Act (ANILCA, 16 USC §§ 3101-3233)

Section 103(b) provides the Secretary of Interior the authority to make minor adjustments in the boundaries of areas added to or established by ANILCA with written notification to Congress. Section 1302(i)(1) authorizes the Secretary to acquire by donation or exchange lands contiguous to a conservation system unit.

Planning Issues Considered but not Addressed

The following planning issues were identified during scoping, but are not addressed in this document. Many issues are not addressed because this plan is only a limited amendment of the 1986 General Management Plan and focuses on issues for which the guidance in the GMP is either lacking in detail or out of date.

Major Facility Development

The Denali Entrance Area and Road Corridor (Front Country) Development Concept Plan and the Denali South Side Development Concept Plan amended the park *General Management Plan* and provided for anticipated visitor facility needs on both the north and south sides of the park.

Denali North Access

Language contained in Senate Amendment 39, page CR H14289 for Fiscal Year 1996 directed the National Park Service to conduct a North Access Feasibility Study in cooperation with the State of Alaska and the tourism industry. This study was completed in April 1997. In transmitting this study to the Senate Committee on Energy and Natural Resources, the Department of Interior memorandum stated that:

The projected costs of either new road access or rail access into Denali would exceed the projected costs for the National Park Service's 10-year, visitor access development program for the entire State of Alaska. Thus, we believe this study must be considered in conjunction with the other National Park Service proposals for visitor facilities and access in Alaska—proposals developed with input from the State of Alaska, the visitor industry and the public.

This study is not to be interpreted in any way as implying that the National Park Service supports a northern route. Again, a new north access is contrary to the existing management plan for Denali National Park and Preserve (US Department of the Interior, 1997).

Congress has funded additional studies since the completion of the 1997 report. Funding was provided in fiscal year 2000 for a cooperative study with the State of Alaska to explore options for the location of campgrounds, trails, and other visitor facilities along the Stampede Road alignment, and that study was completed in August 2004. In 2002, the Denali Borough and the State of Alaska Department of Transportation and Public Facilities began a planning and reconnaissance study for a north Denali access route as directed by federal and state authorizations. Pending further decisions and actions on north access, the backcountry areas that might be affected by north access proposals will be managed as the rest of the park additions.

Wilderness Suitability and Wilderness Recommendations

ANILCA section 1317(a) required the National Park Service to conduct a wilderness suitability review, which was included in the 1986 *General Management Plan* for Denali National Park and Preserve. The review concluded that about 3.73 million additional acres of the non-designated lands in the park and preserve were suitable for wilderness designation. An area within the Kantishna Hills was determined to be unsuitable for wilderness because of persistent disturbance caused by past mining and the road system; however, most of these lands are now suitable because of changing conditions. For example, most mining properties have been purchased and many of these areas are being restored. A new suitability study would likely result in additional acreage identified as suitable in the Kantishna Hills, but that study is not included with this plan.

In 1988, the National Park Service forwarded an environmental impact statement for wilderness recommendations to the secretary of the interior. The preferred alternative identified 2.25 million acres of the 3.73 million suitable acres to be proposed for wilderness designation. The secretary of the interior did not forward the proposal to the president to send to Congress for approval. Because of the complexity of the process and the fact that wilderness designation requires congressional action, wilderness recommendations are not addressed in this plan. However, as discussed in the plan the wilderness values of the suitable lands will continue to be protected.

Subsistence Management

Subsistence management for Denali National Park and Preserve is addressed in the 2000 *Subsistence Management Plan* (NPS 2000i) that was prepared in cooperation with the Denali Subsistence Resource Commission. The backcountry management plan, therefore, does not include recommendations for managing subsistence uses. Because of the importance of these uses and because of potential conflicts from other uses, however, subsistence is included as an impact topic.

Snowmachine Access in Old Park by Individuals with Disabilities

The National Park Service has determined that any snowmachine use would be detrimental to the resource values of the Old Park. As a result, areas of the park that are closed to snowmachine use (such as the Old Park) would not be open to snowmachine use by persons with disabilities. This decision treats all potential users equally in that snowmachine use is prohibited for everyone in the Old Park. The commercial dog sled companies that operate in the Old Park have expressed a willingness to take any interested individuals, including those with disabilities, into the Old Park.

Off-Road Vehicle (ORV) Use

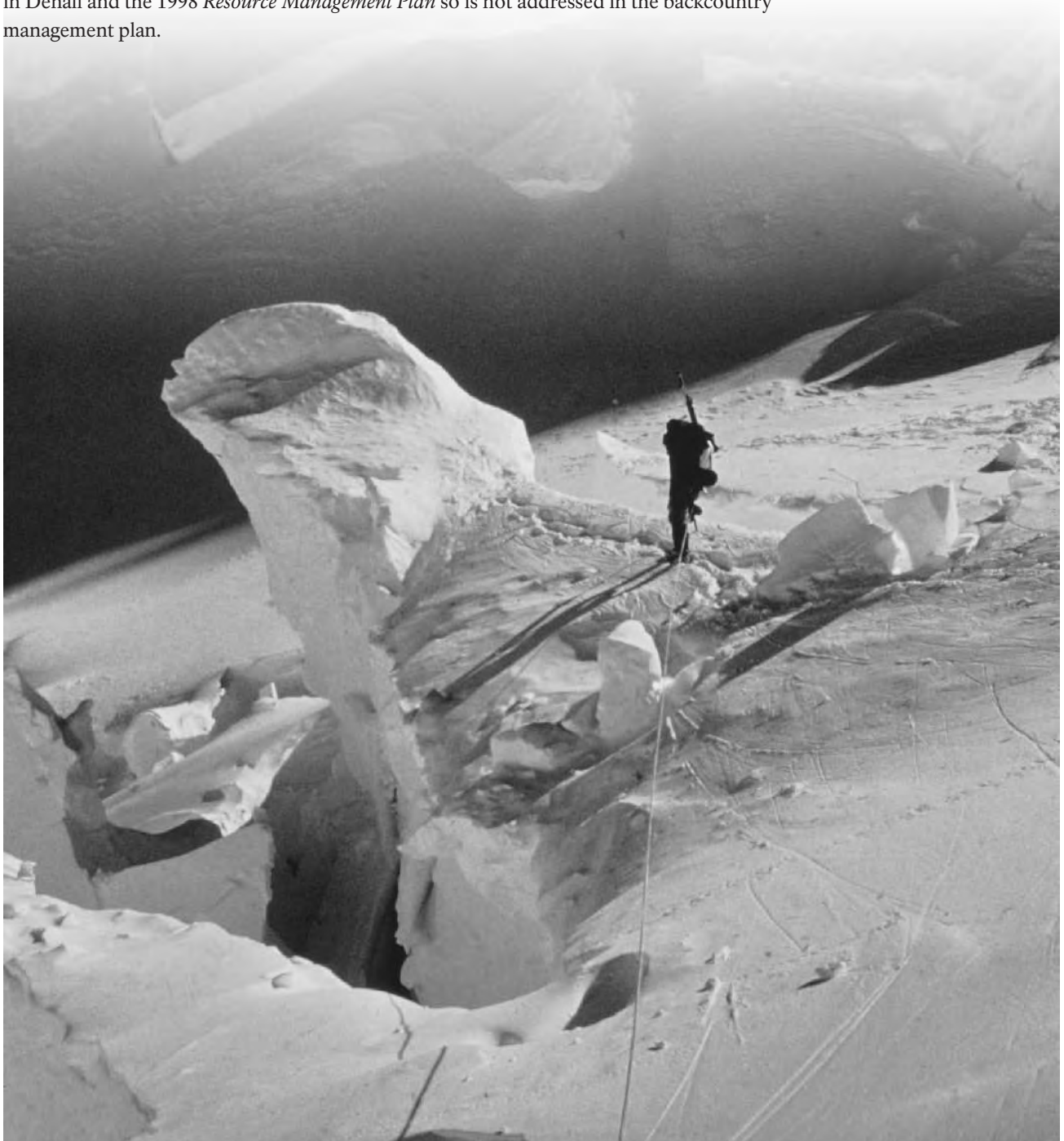
The use of ORVs, except on established roads is generally prohibited in Denali (36 CFR § 4.10, 43 CFR § 36.11). ORV use can occur on state right-of-ways. ORVs have been authorized in the past and may be authorized in the future to access inholdings in the Kantishna Hills pursuant to a right-of-way permit. ORVs traditionally employed for subsistence purposes are regulated under 13 CFR § 13.46, and a separate plan and NEPA compliance will address resource protection alternatives pursuant to the July 2005 Cantwell Subsistence Traditionally Employed ORV Determination.

Natural and Cultural Resource Management

Priorities for studies and procedures for managing natural and cultural resources are not addressed in the backcountry management plan since they are included in the 1998 *Resource Management Plan*. That plan outlines management and study of air resources, aquatic resources, geological resources, terrestrial biota, wildland fire, cultural resources, and subsistence resources.

Minerals Management

This topic is included in the 1991 *Record of Decision on the Cumulative Impacts of Mining* in Denali and the 1998 *Resource Management Plan* so is not addressed in the backcountry management plan.





THE PLAN

Introduction

This chapter contains the approved *Backcountry Management Plan* which is a modified version of the preferred alternative from the *Revised Draft EIS*. This alternative incorporates the proposals from Actions Common to All Action Alternatives, some of which have also been modified. The complete versions of the original preferred alternative (Alternative 4) and the other alternatives are found in the *Revised Draft EIS*.

The approved plan is described below using the same topic areas as the alternatives in the *Revised Draft EIS*.

- Management Areas
- Access
- Wilderness Management
- Commercial Services
- Backcountry Facilities
- Administrative and Scientific Activities
- Easements and Boundary Changes

Existing backcountry units and requirements for overnight camping permits, use limits, and food storage have been developed through previous planning efforts, including the 1976 *Backcountry Management Plan* and its subsequent modifications. These provisions will apply as described in appendix D of the *Revised Draft EIS*.

Overview

This backcountry management plan will guide the National Park Service in providing opportunities for a variety of wilderness recreational activities and experiences while recognizing and protecting the premier wilderness resource values of the entire backcountry. Areas in the Dunkle Hills and around the Ruth and Tokositna Glaciers on the south side of the Alaska Range will be managed for those visitors who want to experience the wilderness resource values or other resource values of the Denali backcountry but require services or assistance, or who are unable to make a lengthy time commitment. Areas along the park road in the Old Park and the Kantishna Hills will provide accessible opportunities for short- or long-duration wilderness recreational activities with only limited options for guidance or assistance the farther one gets from the park road. The remainder of the backcountry will be managed for dispersed, self-reliant travel, and will include opportunities for extended expeditions in very remote locations.

Management Areas

This alternative plan subdivides the Natural zone identified in the 1986 *General Management Plan* into a variety of more specific management areas. Each of these new management areas reflects an overall management concept or vision and provides for a related set of opportunities in the backcountry. Each area is defined by a set of desired future resource and social conditions. Allocation of management areas is a prescriptive process that describes the desired condition rather than the existing condition.

For all areas, common management policies will apply to subsistence activities, fire management, cultural resources management, natural resources management, and reclamation as expressed in other plans. These plans include:

- *Subsistence Management Plan* (NPS 2000i, annual updates)
- *Fire Management Plan* (NPS 2004a)
- *Resource Management Plan* (NPS 1998)
- *Reclamation Plan* (NPS 2001c)

Map 2 shows how management areas are applied under this plan.

The backcountry includes privately-owned lands, some unpatented mining claims in the Kantishna Hills, lands conveyed to the State of Alaska, and certain segments of the State road and railroad right-of-way easements. The National Park Service recognizes these inholdings and respects the rights of the landowners. Inholdings are located primarily in the Kantishna area and the northwest part of the preserve, with a few on the south side of the Alaska Range such as the Mountain House in the Ruth Amphitheater and the Tokosha Mountain Lodge along the Tokositna River. These inholdings remain in the Special Use zone as described in the 1986 *General Management Plan*. The name for that management zone is modified to Inholdings Special Use Area to distinguish it from the Ruth Glacier and West Buttress Special Use Areas described below. Those private lands designated Special Use in the 1986 *General Management Plan*, but which 1) have been acquired by the National Park Service, and 2) are within the geographic scope of the backcountry management plan, are included within the new management areas described by this plan.

Management Area Descriptions

The management areas are defined to provide specific recreational opportunities and resource conditions that are appropriate given the purposes for which the national park unit was established. Most of the areas are designed to cover substantial areas of the park and preserve, but some—including the Backcountry Hiker, Corridor, Portal, and West Buttress Special Use areas—are intended to provide high use routes, trails, or landing areas to accommodate backcountry transportation and concentrated use directed at particular destinations. The former Mount McKinley National Park (the Old Park) has separately defined management areas to reflect its unique history, resource values, and legal status.

The management areas are defined in the Table 1. Each area has an indicated purpose, followed by descriptive terms for several qualities that define minimally acceptable conditions for that management area. These qualities are indicators of the visitor experience and resource conditions in each management area. Although they do not capture the entire range of qualities that comprise the experience and resources of the area, they are intended to provide both a reasonable indication to visitors of what they should expect and guidance to managers about appropriate management actions and levels of use. The indicators chosen for the Denali backcountry include the following:

Resource Conditions

- Trail and campsite disturbance
- Evidence of modern human use
- Landscape modifications
- Litter and human waste
- Natural sound disturbance
- Wildlife population, demographics, and distribution

Social Conditions

- Encounters with other people
- Encounters with large groups
- Camping density
- Accessibility
- Management presence

Following the definitions in Table 1 are two tables (Tables 2 through 3) that provide a key for the indicators, defining them and their condition levels. These tables provide a narrative description for desired conditions, specific standards that provide a quantitative interpretation of those conditions, and both a monitoring strategy and a review process for each indicator.

Indicators are generally selected to represent those resources and conditions that are allowed to change until they approach the quantitative thresholds. However, the National Park Service will take action to manage visitor use under many other circumstances if that use would be detrimental to resource values of the park. For example, the National Park Service will act to avoid the introduction of exotic plant species to the park backcountry; to protect wildlife habitat particularly during critical times such as breeding, nesting, and denning; to protect subsistence resources and opportunities; and to avoid bear-human conflict.



Table 1: Management Area Descriptions

Table 1: Management Area Descriptions

Management Area	Purpose	Resource Conditions					Social Conditions				
		Trail & Campsite Disturbance	Evidence of Modern Human Use <i>max. encounters/day</i>	Landscape Modifications <i>allowed to mitigate for visitor use?</i>	Litter & Human Waste - <i>max. % of visitors who encounter</i>	Natural Sound Disturbance	Encounters with People <i>max. parties encountered/day</i>	Encounters with Large Groups <i>encounters possible?</i>	Camping Density <i>able to camp out of sight and sound (s&s) of others?</i>	Accessibility	Administrative Presence
A	Provide a diversity of opportunities for wilderness recreational activities that are relatively accessible to day-users and to those who have limited wilderness travel skills or equipment.	Medium occasional social trails, campsites	Medium 3 encounters/day	No	Low 5%	High max % aud/hr: 25 max #/day: 25 max dBA: 60	High 5 encounters/day	Yes	Low always able to camp out of s&s	Medium	Medium routine visitor contacts
B	Provide opportunities for wilderness recreational activities suitable for day-users and overnight users that are remote and require self-reliance.	Low few if any social trails, campsites	Low 1 encounter/day	No	Low 5%	Medium max % aud/hr: 15 max #/day: 10 max dBA: 40	Medium 2 encounters/day	Yes	Low always able to camp out of s&s	Low-Medium	Low occasional patrols
C	Provide opportunities for climbing and mountaineering experiences in a wilderness setting.	Medium occasional social trails, campsites	Medium 3 encounters/day	No	Low 5%	Medium max % aud/hr: 15 max #/day: 10 max dBA: 40	High 5 encounters/day	Yes	Low always able to camp out of s&s	Low-Very Low	Low occasional patrols
D	Provide opportunities for extended expeditions that are remote and require self-reliance, significant time commitment, and thorough advance planning.	Low few if any social trails, campsites	Low 1 encounter/day	No	Low 5%	Low max % aud/hr: 5 max #/day: 1 max dBA: 40	Low unlikely to encounter other parties	No	Low always able to camp out of s&s	Low	Low occasional patrols
Portal	Provide high-use airplane landing areas that provide access to remote parts of the park and preserve. Year-round or seasonal.	N/A	Medium 3 encounters/day	No	Low 5%	Same as for surrounding area, but no lower than Medium	N/A	Yes	Medium may have to camp in s&s during peak season	Medium	Medium routine visitor contacts
Portal - Major Landing Area	Provide high-use airplane landing areas that are suitable for both day use and expedition drop-off and pick-up. Seasonal, May-September.	N/A	High 5 encounters/day	Yes	Low 5%	Very High max % aud/hr: 50 max #/day: 50 max dBA: 60	N/A	Yes	High little or no opportunity to camp out of s&s	High	Medium-High routine visitor contacts - frequently present
Corridor	Provide high-use travel routes via ground or water that provide access to remote parts of the park and preserve. Year-round or seasonal.	Medium occasional social trails, campsites	High 5 encounters/day	Yes	Low 5%	High max % aud/hr: 25 max #/day: 25 max dBA: 60	Very High 10 encounters/day	Yes	Medium may have to camp in s&s during peak season	Low-High	Medium routine visitor contacts
Backcountry Hiker	Provide day use trails into the backcountry in areas that are accessible to many visitors. Year-round or seasonal.	N/A	High 5 encounters/day	Yes	Low 5%	Medium max % aud/hr: 15 max #/day: 10 max dBA: 40	Very High 10 encounters/day	Yes	N/A no camping allowed on trails	High	High frequently present
Ruth Glacier Special Use	Provide for high use of transportation services during the season when large numbers of day users are accessing the Ruth Amphitheater. Seasonal,	Medium occasional social trails, campsites	Medium 3 encounters/day	No	Low 5%	Very High max % aud/hr: 50 max #/day: 50 max dBA: 60	High 5 encounters/day	Yes	Low always able to camp out of s&s	Low-Very Low	Medium routine visitor contacts
Old Park											
OP1	Provide opportunities for day use and overnight wilderness recreational activities that are remote and require self-reliance in an area that has limited opportunities for motorized access.	Medium occasional social trails, campsites	Low 1 encounter/day	No	Low 5%	Low max % aud/hr: 5 max #/day: 1 max dBA: 40	Medium 2 encounters/day	Yes	Low always able to camp out of s&s	Medium-High	Medium routine visitor contacts
OP2	Provide opportunities for extended expeditions that are remote and require a high degree of self-reliance, significant time commitment, and thorough advance planning in an area that has limited opportunities for motorized access.	Low few if any social trails, campsites	Low 1 encounter/day	No	Low 5%	Low max % aud/hr: 5 max #/day: 1 max dBA: 40	Low unlikely to encounter other parties	No	Low always able to camp out of s&s	Low	Low occasional patrols
West Buttress Special Use	Provide a seasonal route to the summit of Mount McKinley that can accommodate large numbers of climbers during the primary climbing season. Seasonal, late April to mid-July.	N/A	High 5 encounters/day	Yes	Low 5%	Low max % aud/hr: 5 max #/day: 1 max dBA: 40	N/A	Yes	High little or no opportunity to camp out of s&s	Low-Very Low	High frequently present

Table 2: Key to the Management Area Descriptors

Resource Conditions					Social Conditions				
Trail & Campsite Disturbance	Evidence of Modern Human Use	Landscape Modifications	Litter & Human Waste	Natural Sound Disturbance	Encounters with People	Encounters with Large Groups	Camping Density	Accessibility	Administrative Presence
Medium Visitors notice occasional social trails, campsites, or cut or broken vegetation.	High Visitors have at most 5 encounters with modern equipment or landscape modifications each day of their trip.	Yes There may be visible mitigations for visitor use such as constructed trail segments, route markers, signs, bridges, designated campsites, food storage facilities, sanitation facilities, fixed climbing lines, or others as described or proposed by this plan.	Low No more than 5% of visitors encounter human waste, toilet paper, or litter in the backcountry.	Very High Natural sounds are often interrupted by motorized noise including loud noise. Motorized noise may be audible up to 50% of any hour, and there may be up to 50 motorized noise intrusions per day that exceed natural ambient sound. Motorized noise does not exceed 60dBA.	Very High Visitors commonly encounter other parties in these areas. They generally encounter 10 or fewer parties per day.	Yes 1 or 2 of the parties encountered may have more than 6 people.	High During the season of peak visitation, there is little or no opportunity for visitors to camp out of sight and sound of others. At other times of year visitors may be able to camp out of sight and sound of others.	High These areas are suitable for casual use and do not require extensive time commitments, specialized backcountry travel skills, advance planning, or self-reliance.	High Rangers are frequently present, so visitors generally have some contact with them. Visitors may occasionally encounter staff or permitted researchers involved in inventory and monitoring projects and research in some areas.
Low Visitors notice few if any signs of social trails, campsites, or cut or broken vegetation.	Medium Visitors have at most 3 encounters with modern equipment or landscape modifications each day of their trip.	No There are no visible landscape mitigations for visitor use.		High Natural sounds are frequently interrupted by motorized noise, including some loud noise. Motorized noise may be audible up to 25% of any hour, and there may be as many as 25 motorized noise intrusions per day that exceed natural ambient sound. Motorized noise does not exceed 60dBA.	High Visitors commonly encounter other parties in these areas, although they still have many opportunities to be alone. They generally encounter 5 or fewer parties per day.	No No parties are encountered that are larger than 6 people.	Medium During the season of peak visitation, visitors may have to camp within sight or sound of others, but often are able to avoid doing so. At other times of year visitors generally are able to camp out of sight and sound of others.	Medium Visits to these areas require self-reliance, but may not require extensive time commitments, specialized backcountry travel skills, or extensive advance planning.	Medium Rangers may make routine visitor contacts, so visitors may be aware of administrative presence. Visitors may occasionally encounter staff or permitted researchers involved in inventory and monitoring projects and research in some areas.
N/A Identifies an alpine area that has very scarce or no vegetation or soil. Trails and campsites on snow are not monitored.	Low Visitors have at most 1 encounter per trip with modern equipment or a landscape modification.			Medium Natural sounds predominate in this area, but there are infrequent motorized intrusions, a few of which may be loud. Motorized noise may be audible up to 15% of any hour, and there may be as many as 10 motorized noise intrusions per day that exceed natural ambient sound. Motorized noise does not exceed 40dBA.	Medium Visitors occasionally encounter other parties in these areas, but are almost always alone. They generally encounter 2 or fewer parties per day.		Low Visitors are always able to camp out of sight and sound of others.	Low Visits to these areas require significant time commitment, some specialized backcountry travel skills, advance planning, and a high-degree of self-reliance.	Low Administrative presence is generally limited to emergency activities and occasional patrols, with research and resource monitoring projects in some areas.
				Low Natural sounds predominate in this area and motorized noise intrusions are very rare and usually faint. Motorized noise may be audible up to 5% of any hour, and there is no more than 1 motorized intrusion each day that exceeds natural ambient sound. Motorized noise does not exceed 40dBA.	Low Visitors are unlikely to encounter other parties in these areas during the course of their backcountry trip.		N/A No camping will be allowed on the trails.	Very Low Visits to these areas require significant time commitment, specialized backcountry travel skills, thorough advance planning, and a high degree of self-reliance.	
					N/A There is no standard for encounter rate in this area. Visitors may always be within sight or sound of other visitors.				
Notes The “Medium” descriptor is intended to match current conditions in the Old Park in areas accessible from the park road corridor. The first phase of the monitoring program will utilize existing data and new field observations to describe those conditions in more detail.	Notes “Modern equipment” includes communication facilities, research equipment, chain saws, motorized or mechanized vehicles on the ground, and other similar devices. This definition does not include portable devices that a person could reasonably carry without assistance (e.g., cell phones, GPS units, fuel-burning stoves), subsistence equipment such as traps or firearms, or aircraft in flight. An “encounter” refers to visual recognition. A single trail or route markers associated with a single route will count as only one encounter. Audio recognition of noise is covered under the Natural Sound Disturbance standards.	Notes “Landscape modifications” specifically do not include historic or cultural resources such as historic cabins, gravesites, or other structures or artifacts. They also do not include permitted modifications for subsistence use such as cabins or trapline trails.		Notes “Audible” means audibility to a person of normal hearing. Maximum sound levels assume the measurement device is more than 50 feet from the noise source. For comparison, 40dBA is the overall sound level inside a typical residential home. 70dBA is the sound level of a vacuum cleaner as perceived by the user.	Notes An encounter is the unaided recognition by sight or sound of another park user, including other recreational-ists or subsistence users. An encounter does not include aircraft in flight which are addressed under Natural Sound Disturbance.		Notes This category refers only to the opportunity to camp outside of sight or sound of other park visitors; however, visitors may still choose to camp where they can see or hear others. “Sight or sound” refers to unaided recognition of another campsite from the site where the visitor camps for the night.	Notes NPS management largely determines the degree of accessibility by providing facilities (such as trails) or services (transportation, guide services) that determine how easy or difficult it is to travel in an area of the park. Terrain also plays a role, primarily in the alpine mountaineering areas that require specialized equipment and knowledge. These are the only areas that achieve a “very low” rating, although the availability of guide services that can provide equipment and instruction can boost the rating to a “low.” Areas accessible to day visitors who decide to visit spontaneously without planning or preparation achieve a “high” rating.	Notes This category only includes interactions with administrative and research personnel, which are not included with the encounter rate standards given above. Interactions with park aircraft, research equipment, snowmachines, or other equipment are included in the standards for Evidence of Modern Human Use and Natural Sound Disturbance.

Table 2: Key to the Management Area Descriptors

THE PLAN		MANAGEMENT AREAS
Table 3: Monitoring and Process for Evaluation		
Indicator	Monitoring	Process for Evaluation
Trail & Campsite Disturbance	Monitoring will occur at three levels. These include: 1) the use of an existing grid system of plots for monitoring changes in vegetation cover that are randomly distributed through the park and preserve, 2) a set of index sites where known social trail or campsite formation can be monitored, and 3) a random sample of additional locations selected each year. Variables to monitor will include bare ground, vegetation cover, soil compaction, physical damage to plants, and site characteristics, such as soil moisture and soil temperature.	The “Medium” descriptor is intended to match current conditions in the Old Park in areas accessible from the park road corridor. The first phase of the monitoring program will utilize existing data and new field observations to describe those conditions in more detail.
Evidence of Modern Human Use and Landscape Modifications	Monitoring will be conducted at least once every five years by visitor survey, and will be supplemented by continuous observation of ranger patrols.	The first visitor survey after plan approval will contain questions to evaluate the usefulness of this indicator and investigate other alternatives for indicating the impact of modern civilization on the wilderness experience. Survey results could be used to modify this indicator, but the relative differences between categories (High, Medium, Low) will be retained.
Litter & Human Waste	Monitoring will be conducted at least once every five years by survey of backcountry visitors. This information will be supplemented by the observations of park staff during backcountry patrols.	
Natural Sound Disturbance	Sound monitoring will be conducted on a continuous basis using remote monitors. Long-term monitoring and attended monitoring will take place at locations of particular concern or where it has been determined that management action is necessary to meet standards. Other locations will be randomly sampled.	Indicators and standards will be used as benchmarks for five years while additional information is gathered through the initial stages of the monitoring program. After five years, the NPS will propose changes to either the indicators or standards through a public process. Relative differences between categories (Low, Medium, High, Very High) will be retained during the revision process.
Encounters with People and Large Groups	Monitoring will be conducted at least once every five years by survey of backcountry visitors and “displaced”backcountry visitors. This information will be supplemented by the observations of park staff during backcountry patrols. “Displaced” backcountry visitors are those who will visit the park backcountry, but do not because management limitations, crowding, or other factors make it an undesirable destination.	The NPS will review encounter rate standards after each five-year survey to evaluate visitor satisfaction and the success of the standards in achieving management area goals. If professional judgment suggests that changes are necessary, the NPS will propose new indicators and/or standards through a public process. The relative differences between management areas will be retained.
Camping Density	Monitoring will be conducted at least once every five years by survey of backcountry visitors. This information will be supplemented by observations of park staff during backcountry patrols.	As part of the monitoring process, NPS will evaluate the importance placed by park users on this indicator. The distinctions between categories could be adjusted through a public process within the context of all the indicators related to “social conditions” in the park backcountry.
Accessibility	This category is descriptive only. The actions that determine the rating are listed elsewhere in this plan. Since the status will not change without additional action, monitoring is unnecessary.	
Administrative Presence	Ranger patrols will record and report visitor contacts. Visitor surveys will assess the amount and quality of interactions between visitors and NPS rangers and researchers at least once every five years.	There are no specific quantitative indicators or standards proposed for this category.

Wildlife

Wildlife is one of Denali's most important resources. Active monitoring of the populations, distributions, and demographics (e.g., age structure, gender ratios) of major wildlife species will occur throughout the duration of plan implementation. If statistically significant changes occur in any of the variables listed, and these changes could be correlated with changes in visitor use, the National Park Service will take actions described in this plan to manage the level and/or type of visitor use. Additional development of wildlife indicators and standards will occur during plan implementation. The National Park Service will consult with the Alaska Department of Fish and Game during the development of specific indicators, standards, and protocols for monitoring.

Management Area Designations

Management areas are applied as depicted in Map 2. The percentage of the park and preserve allocated to each management area is as follows:

Table 4: Area of Park and Preserve by Management Area

Management Area	Acres	% Backcountry
A	358,256	6%
B	962,244	16%
C	312,469	5%
D	2,242,454	38%
OP1	1,408,886	24%
OP2	737,409	11%
TOTAL	6,028,202	100%
Special Use Areas	150,269	2.5%

Summer season Corridors are designated as follows:

- Kantishna and Muddy Rivers (56 miles)
- the lower Tokositna River (4 miles)
- Skyline and Moose Creek former mining access routes in Kantishna (10 miles).

If demand is sufficient, the National Park Service could also designate the following winter season Corridor management areas:

- three Corridors from the southern park boundary to the Old Park boundary near West Fork Chulitna River, Bull River, and Cantwell Creek (12.5 miles)
- the lower Tokositna River (4 miles)
- the upper Tokositna River to the mouth of Wildhorse Creek (3 miles).

All Corridors are depicted on Map 3.



The Ruth Glacier Special Use Area is designated to include areas of the Ruth and Tokositna Glaciers as shown on Map 2. Backcountry Hiker designations are described below under Backcountry Facilities.

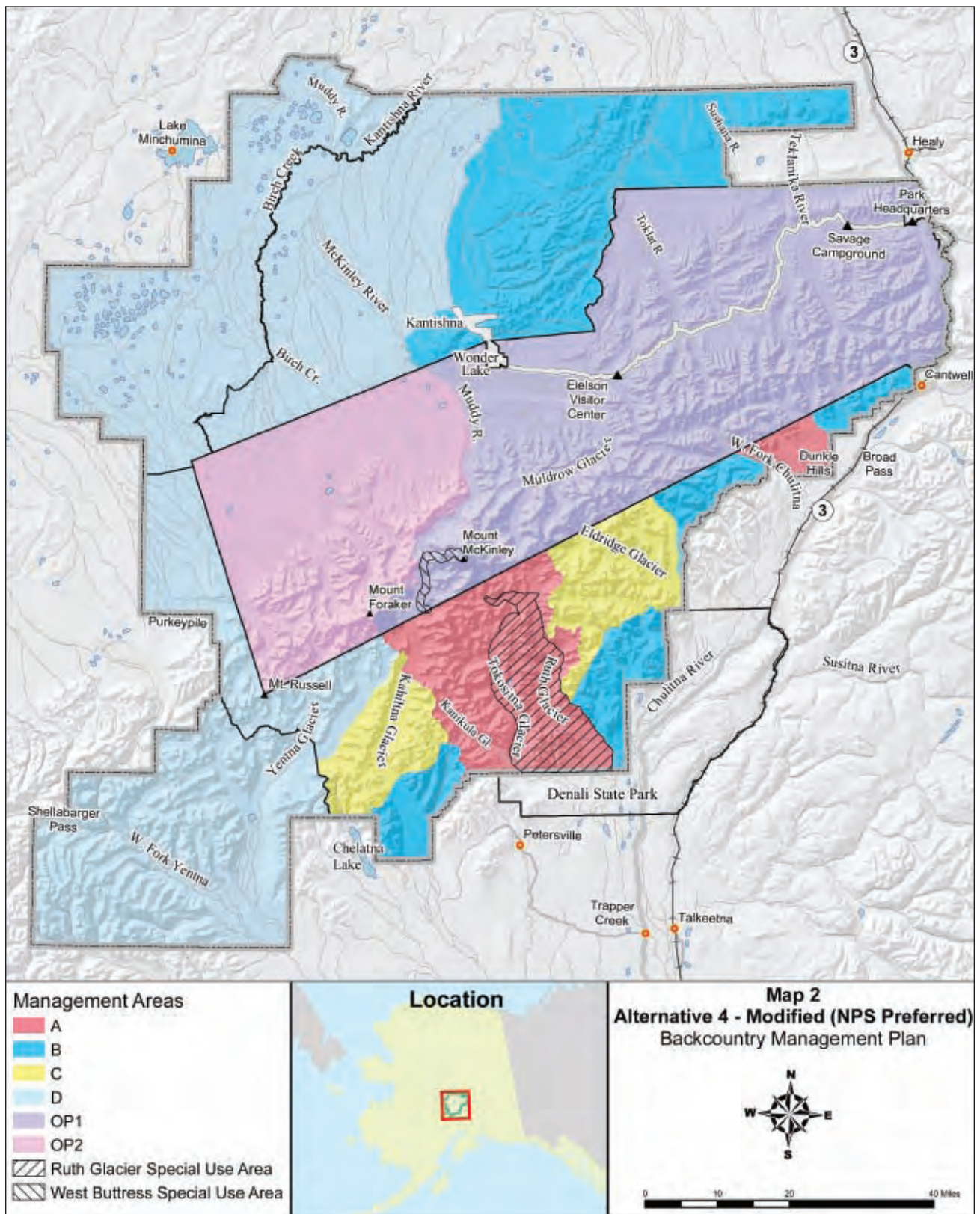
Major Landing Areas and Portals is designated as follows (see Map 4):

- Major Landing Areas – Kahiltna Base Camp and Ruth Amphitheater
- Portals – Pika Glacier, Coffee Glacier, Buckskin Glacier, Eldridge Glacier, and upper Tokositna Glacier.

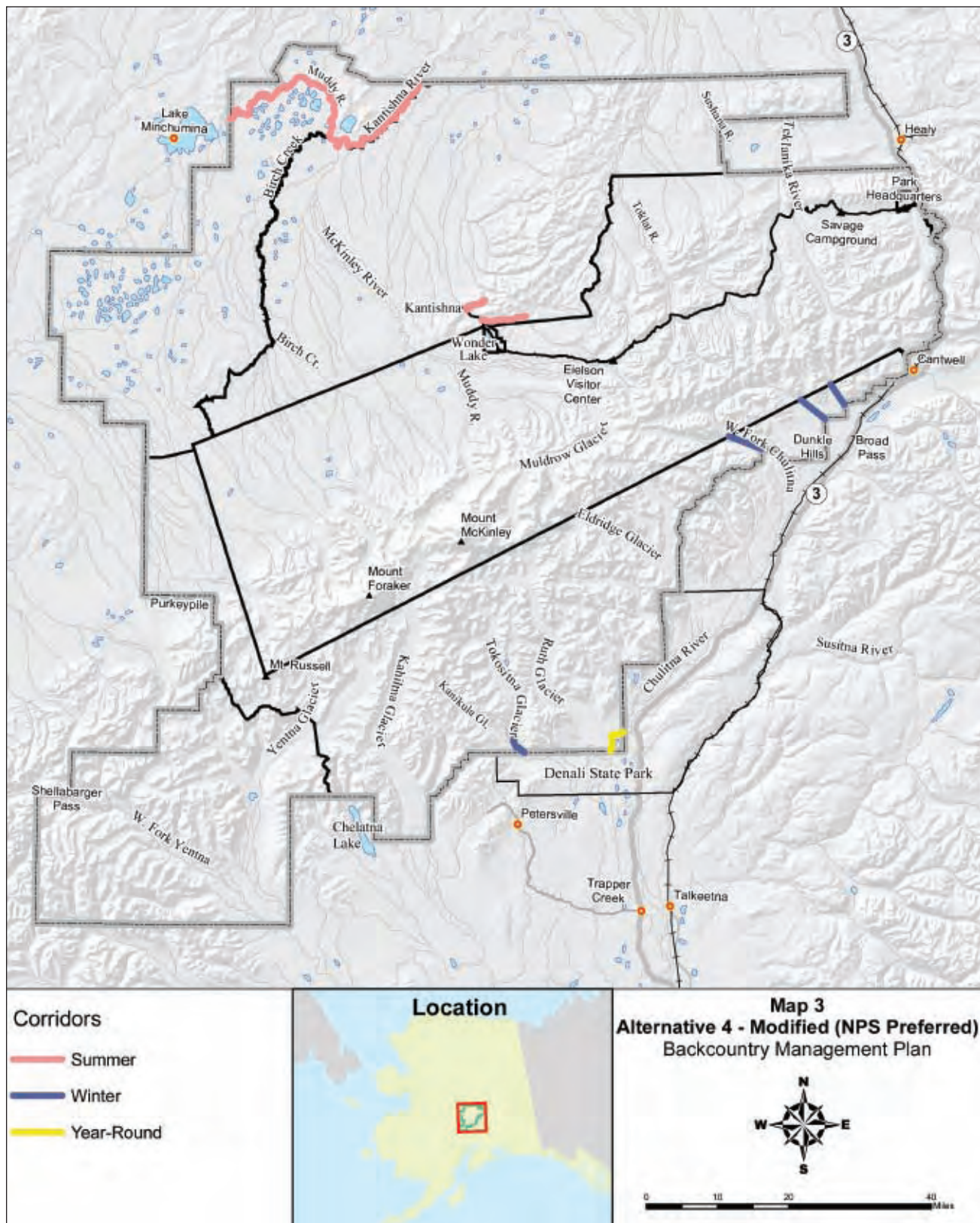
The locations of Major Landing Areas and Portals could be adjusted to respond to changes in the glaciers; however, the number and approximate size of the Major Landing Areas and Portals will remain the same as these adjustments occur.

The West Buttress Special Use Area is designated to include the entire West Buttress route on Mount McKinley, from the Old Park boundary at the Kahiltna Base Camp portal to the summit of the mountain. Existing backcountry trails (those that extend beyond the development zones and Backcountry Day Use Areas described in the 1997 *Entrance Area and Road Corridor DCP* are designated as Backcountry Hiker areas. These trails are described in the Visitor Use and Experience section of Chapter 3, Affected Environment.

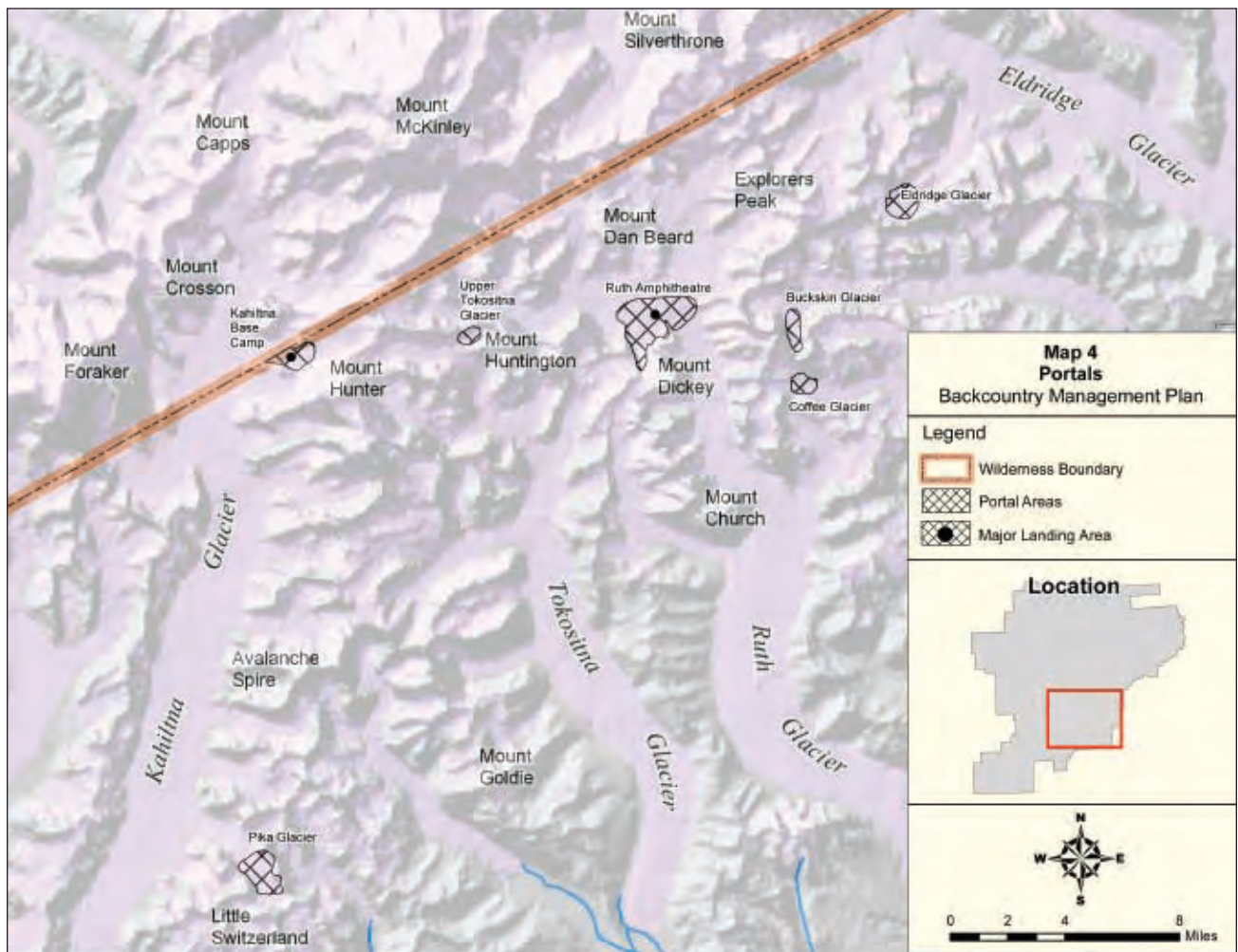
Map 2: Management Areas—Alternative 4—Modified (NPS Preferred)



Map 3: Corridors—Alternative 4—Modified (NPS Preferred)



Map 4: Portals



Access

General Guidance

Access to all parts of the Old Park, park additions and preserve will be managed to achieve management area standards using the tools identified below. Recreational access to the Old Park will continue to be managed to emphasize non-motorized access, but this area will be accessible by airplane and motorboat. The National Park Service will actively identify locations in the Old Park that have ecological, wildlife, or other resource values that are at substantial risk of harm from airplane landings or motorboat use, and locations where these modes of access would cause unacceptable impacts to visitor safety. The National Park Service will close or otherwise manage motorized access to these areas as appropriate to alleviate the resource and safety concerns. In the park additions and preserve, airplane and motorboat access, and snowmachine access for traditional activities, will continue. If Congress considers additional wilderness designations for Denali, the National Park Service will propose that accommodation be made as necessary for recreational snowmachine access along the winter season Corridor management areas.

The National Park Service is committed to providing visitors to the national park and preserve with reasonable access for wilderness recreational activities, traditional activities, and for other purposes as described in ANILCA and other laws summarized in chapter 1. The National Park Service will generally allow independent, cross-country travel by any legal means, and will encourage access to the park and preserve by means of facilities (e.g., trails and marked routes) and services (e.g., commercial air taxi and guide services) as described in the Backcountry Facilities and Commercial Services portions of this plan. If it becomes necessary to manage travel in any area to achieve desired future resource and social conditions for an area, to reduce visitor conflict, or to protect visitor safety, the National Park Service will use the least restrictive mechanism or “tool” necessary to accomplish the goal. The National Park Service need not wait for conditions to match or exceed standards before taking management action; an expectation that conditions would exceed standards is sufficient to mandate a response. Restrictions and closures will be accomplished consistent with the process outlined in 43 CFR 36.11 and/or other relevant regulations.

Table 5 lists the tools that may be used to manage access when necessary, arranged in rough order from the least restrictive to the most restrictive. The park superintendent is free to pick whichever tool is required as long as the “least restrictive” criterion is heeded. There is no implication that the tools must be tried in the listed order and a failure elicited before trying the next one.

Table 5: Access Management Tools

1) Education	The National Park Service would provide printed material, public presentations, targeted presentations to user groups, and Internet-based programs, with the goal of actively involving visitors in helping the park achieve the standards for all management areas.
2) Increased enforcement of existing regulations	The National Park Service would prioritize enforcement of existing regulations to assist in achieving standards for management areas. For example, enforcement of the snowmachine speed limit or the sound level limits on motorized equipment could assist in achieving standards for sound quality.
3) Voluntary restrictions	The National Park Service would ask visitors to restrict their use voluntarily. Examples of such measures could include: voluntary registration; use of low-impact equipment; avoidance of certain areas of the park or preserve; or avoidance of areas during particular seasons or times of day. Voluntary registration would not require a permit and could be accomplished by trailhead register, phone or radio call-in, or the Internet.
4) Required registration	The National Park Service would require visitors to register. Visitors would be issued a permit that provides information about park rules and conditions for use necessary to protect park resources. Permit conditions could include minimum impact travel and camping requirements and resource protection requirements; however, a registration process would not limit the number of visitors or the type or amount of access. Registration is a means to gather information about visitor use levels and to ensure visitors receive necessary resource protection and safety information.
5) Technology requirements or other requirements governing means of access	To achieve management area standards, the National Park Service would place requirements on the means of access. For example, the NPS could require individuals to use technology that meets specific noise specifications if those individuals are accessing the park by snowmachine, motorboat, or airplane.
6) Management of commercial activity	The National Park Service would adjust concession contracts and other commercial use permits to govern use levels or direct authorized commercial activity to locations, seasons, or times of day as necessary to achieve management area standards.
7) Regulate numbers of visitors	The National Park Service would establish quotas for visitor numbers in areas of the park additions and preserve when the volume of use is high enough that other mechanisms are unlikely to achieve standards. Visitors would be required to register and carry a permit, and the number of available permits would be limited. This is the mechanism presently used to manage overnight backcountry use in the Old Park and parts of the Kantishna Hills.
8) Temporal restrictions	The National Park Service would restrict access to particular times of day, days of the week, or other unit of time, or the duration of access could be limited.
9) Temporary and permanent closures	Using the appropriate authorities, the National Park Service would temporarily or permanently close areas of the park and preserve to all types of visitor use or to specific modes of access.
10) Management authorities of other agencies	The National Park Service would seek assistance from cooperating entities, such as the Federal Aviation Administration or State of Alaska, to apply regulatory or other measures to protect park resource values and achieve management area standards.

Registration and Permit Systems

The National Park Service will study and deploy the most efficient, cost-effective, and user-friendly system for park visitors to register or obtain permits to access the park backcountry where required. The goals will be to: 1) provide safety and resource protection information to visitors before they enter the backcountry; 2) track the amount and type of visitor use; 3) improve the existing system; and 4) if necessary, expand the system to serve new activities and/or areas. Some options that will be considered include:

- Same-day and advance permits or registration
- One-time, seasonal, and annual registration
- Staffed desks or automated kiosks in Anchorage, Fairbanks, Trapper Creek, Talkeetna, Cantwell, Healy, or other locations
- Permits and registration by phone, Internet, or mail, or through transportation services (e.g., air taxis, Visitor Transportation System (VTS) bus system).

The National Park Service will impose new registration requirements only in areas where use levels are sufficient enough that user conflicts and/or resource damage are occurring or will occur and when other methods for obtaining accurate information on visitor use and conveying essential visitor safety and resource protection information are unlikely to be successful. It is likely that overnight use and winter day use from the Kahiltna Glacier east will meet these criteria in the near future. The National Park Service will begin a system of voluntary registration for airplanes landing in the Old Park. To test the feasibility of advance backcountry registration, an experimental system for advance registration will be employed for dispersed camping and camping at designated campsites in the Kantishna Hills.

The number of available permits for climbers attempting to climb Mount McKinley will be restricted to 1,500 during the main mountaineering season (April 1- August 1). The limit of 1,500 will be reevaluated 10 years after approval of the backcountry management plan.

Aircraft Overflights Working Group

The National Park Service will establish an aircraft overflights working group, which will include scenic air tour operators, commercial airlines, general aviation organizations, and other concerned parties. This group will develop voluntary measures for assuring the safety of passengers, pilots, and mountaineers and for achieving desired future resource conditions at Denali.

Cross-Country Travel

Except as otherwise specified in the management area descriptions and the Backcountry Facilities section, backcountry access and travel in Denali will continue without designated routes or constructed trails to allow for freedom to explore and to minimize signs of human presence. To prevent vegetation damage and social trail formation, the National Park Service will take the following actions:

- 1) Apply the Access Management tools specified for the situations described in Table 6.
- 2) Establish a social trails working group consisting of NPS staff, guided hiking concessioners, Murie Science and Learning Center staff and associated non-profit partners, and commercial services that provide access to the backcountry (by shuttle bus and air taxi). This group will address specific problem areas through coordinated action.
- 3) Develop Leave-No-Trace guidelines that are specific for Denali National Park and Preserve in consultation with the internal working group, NPS resource managers, and the Murie Science and Learning Center.

Table 6: Decision Guide for Addressing Social Trail Formation

Situation	Strategy	Application of Access Management Tools
No social trail formation; terrain allows dispersal or travel on durable surfaces (e.g., gravel river beds).	Keep use dispersal	Provide Leave-No-Trace education for backcountry users to encourage continued dispersal and travel on durable surfaces.
No social trail formation at existing use levels, but terrain does not allow for dispersal or travel on durable surfaces.	Maintain use at level such that social trail formation does not begin.	Provide Leave-No-Trace education for backcountry users; manage guided groups to limit use; monitor level of use to detect increases; and limit number of visitors if necessary.
Social trails are present and are either stable or deteriorating, but additional dispersal is possible.	Encourage additional dispersal to lower levels of use on the social trail.	Provide Leave-No-trace education for backcountry users and encourage voluntary dispersal coordination through a social trails working group (see #2 below).
Social trails are present but stable at existing levels of use; little opportunity for dispersal.	Concentrate use on social trail and limit use sufficiently to prevent deterioration.	Educate visitors or restrict them to social trail, and limit numbers of visitors if necessary.
Social trails are present and are deteriorating; additional dispersal is not possible because of terrain.	Lower use levels until condition stabilizes.	Limit number of visitors or use temporary closures to restrict use.
<i>In addition, the National Park Service may temporarily close some areas around social trails to allow rehabilitation even if conditions are stable.</i>		

Wilderness Management

General Guidance

The National Park Service will manage all backcountry areas of the national park to protect wilderness resource values and provide opportunities for wilderness recreational activities, consistent with the direction of law and policy, with particular attention to the following:

- ANILCA Section 101 lists “preserve wilderness resource values” as a fundamental purpose of ANILCA.
- ANILCA Section 102(13) states that the term “wilderness” as used in ANILCA has the same definition as in the Wilderness Act.
- ANILCA Section 202(3)(a) states that a fundamental purpose of the Denali park and preserve additions is to provide continued opportunities, including reasonable access, for wilderness recreational activities.

As described in chapter 1, the Wilderness Act identifies two key components of wilderness character as

- 1) *generally appearing to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; and*
- 2) *having outstanding opportunities for solitude or a primitive and unconfined type of recreation.*

The qualities of “affected primarily by the forces of nature” and the “imprint of man’s work substantially unnoticeable” will be interpreted for Denali by the following characteristics:

- Absence of permanent human structures, including buildings, roads, trails, dams, and communications facilities
- Perpetuation of natural ecological relationships and processes and the continued existence of native wildlife populations in largely natural condition

Providing “opportunities for solitude” will include managing for visitor experiences with the following characteristics:

- Freedom from the reminders of society
- Privacy and isolation
- Absence of distractions, such as large groups, mechanization, unnatural noise, signs, and other modern artifacts

Providing a “primitive and unconfined type of recreation” will include recreation with these characteristics:

- Self-sufficiency, absence of support facilities or motorized transportation
- Direct experience of weather, terrain, and wildlife with minimal shelter or assistance from devices of modern civilization
- Lack of restriction on movement; freedom to explore in the way that is desirable given conditions of weather, terrain, and personal ability; ability to be spontaneous; minimal formal regulatory requirements

The above are the wilderness resource values that the National Park Service will seek to preserve at Denali. The NPS recognizes that ANILCA and other laws provide for exceptions in national park and wilderness management for particular uses or activities. Primary examples include:

- ANILCA 811 allows the use for subsistence purposes of snowmachines, motorboats, and other means of surface transportation traditionally employed for such purposes.
- ANILCA 1110(a) allows use of snowmachines, motorboats, and airplanes for traditional activities.
- ANILCA 1315(d) allows for the construction of a limited number of public use cabins or shelters in designated wilderness if necessary for the protection of public health and safety.
- ANILCA 1316(a) allows the establishment and use of temporary campsites, tent platforms, shelters, and other temporary facilities and equipment directly and necessarily related to the activities of taking fish and wildlife where such activities are allowed.
- Section 4(a-b) of the Wilderness Act establishes that the act does not change the statutory authority for which a park was created, nor does it lower the standards of any other act of Congress which might pertain to or affect such area, including the Antiquities Act or Historical Sites Act allowing for the preservation of historic structures.
- Section 4(c) of the Wilderness Act allows land managers the discretion to use motorized vehicles, use motorized equipment or motorboats, land aircraft, use other forms of mechanical transport, or construct structures or installations as necessary to meet the minimum requirements for the administration of the area for the purpose of this Act (including measures required in emergencies involving the health and safety of persons within the area).

In implementing this plan, and with future management actions, the National Park Service will, with every decision, forego actions that might have no seeming physical impact, but which would detract from the idea of wilderness as a place set apart, a place where human uses, convenience, and expediency do not dominate.

Group Size

The National Park Service will establish a maximum group size of 12 for backcountry areas of Denali for both private and guided groups, including guides. In Management Areas OP2 and D, the maximum group size will be six for both private and guided groups, including guides. The park superintendent could make an exception to the group size limit if that would benefit visitor safety or park resources. This limit does not apply in designated Hiker areas (trails) identified in the 1997 *Entrance Area and Road Corridor DCP*, but does apply on any trail that crosses into a backcountry area within the scope of this plan. Commercial and non-commercial groups will be required to have a group leader who is trained in Leave-No-Trace principles for tundra environments generally and Denali National Park and Preserve in particular. In all cases, larger groups (more than four) will be encouraged to disperse or stay on durable surfaces such as gravel river beds.

Human Waste

Removal of human waste from the park will be required in the following areas:

- The West Buttress Route on Mount McKinley above the 14,000 foot camp
- Campsites within one-half mile of air taxi landing locations on glaciers unless pit latrines or other waste disposal facilities are provided.

In other glaciated locations, including the West Buttress of Mount McKinley below the 14,000-foot camp, climbers will be encouraged, but not required, to remove their waste. Additional requirements for removing waste from glaciated areas could be imposed in high use areas if waste handling technology and techniques improve to make more widespread removal practical. The National Park Service will emphasize education about human waste removal during climber orientation, during patrols, in working with mountaineering organizations such as the American Alpine Club, and in distributed publications.



The current rules on human waste in the Denali backcountry will remain in force. As described in the 2005 Superintendent's Compendium, these rules are as follows:

- *Human body waste will be deposited in cat-holes when the ground is not frozen, dug at least 100 feet from any surface freshwater source.*
- *Toilet paper will be burned or removed as trash.*
- *Persons engaged in any travel (such as skiing, snowshoeing, aircraft landings) or activities (such as mountaineering, climbing, flightseeing, camping) in a glacier environment, such as Mount McKinley and other peaks and glaciers within the park and preserve, must dispose of all human wastes according to the following guidelines:*
 - *Use pit latrines where they are provided by the National Park Service, such as those typically located at the 7,000-foot and 14,000-foot base camps along the West Buttress route, the Ruth Glacier in the vicinity of the Mountain House landing area, and elsewhere as provided.*
 - *At locations without pit latrines, bag all human waste (feces) and carry it out or place it in a deep crevasse. On steeper technical routes outside of the West Buttress, the bag can be tossed away from the climbing route or shovel feces off and away from the route.*

Climbing Tools

Power drills for climbing activities will be prohibited throughout the park additions and preserve.

The following guidance for fixed and removable anchors will be implemented:

- Removable and fixed anchors, as well as other climbing equipment, must be used wisely and be closely managed in order to prevent the degradation of wilderness resources and character. When anchors are necessary for climber safety, removable anchors are desired and highly recommended. Fixed anchors should not be placed merely for convenience.
- Fixed anchors (such as webbing, bolts, pitons, chains) currently in place may remain. They may be replaced or removed by individual climbers during a climb or by the National Park Service during park operations. Safety remains a responsibility of the climber. The National Park Service will not, as a policy or practice, monitor fixed anchors to evaluate their condition. When a climber determines the need for anchor placement or replacement, this must be accomplished in compliance with regulated and permitted standards (for example, power drills may not be used). If unable to do so, the route should remain unclimbed. New, bolt-intensive climbing routes, such as sport climbs and "bolt ladders," are not appropriate and will not be allowed.
- Placement of new anchors may be allowed when necessary to enable a safe rappel when no other means of descent is possible; to enable emergency retreat; during self-rescue situations; and on new routes when ascending a route to connect terrain that is otherwise protected by removable anchors (for example, one crack system or other natural feature to another). Permanent bottom to top fixed anchor routes will not be allowed throughout the Denali backcountry, with the exception of the headwall (15,300-16,200 feet) on the West Buttress route of Mount McKinley.

Commercial Services

The NPS Management Policies 10.2.2 mandates commercial visitor services planning for national parks and preserves. Commercial services may be authorized as concession contracts or commercial use authorizations. A decision to authorize a concession is to be based on a determination that the service:

- is necessary and appropriate for public use and enjoyment of the park in which it is located and identified needs are not, nor can they be, met outside park boundaries,
- will be provided in a manner that furthers the protection, conservation, and preservation of the environment and park resources and values, and
- will enhance visitor use and enjoyment without causing unacceptable impacts to park resources or values.

For the purposes of commercial visitor services planning in the Denali backcountry, these criteria will apply to all commercial visitor service authorizations. To be consistent with the purposes of the park and preserve and the objectives of this plan, the criteria will be interpreted for Denali as follows:

- Commercial services are necessary and/or appropriate in the Denali backcountry if they meet the following criteria:
 - They depend on the unique character and environment of the Denali backcountry, and the same experience cannot be found on nearby public lands.
 - They are consistent with the purposes of the park and preserve as described in chapter 1.
 - They do one of the following:
 - They provide access to remote areas of the park and preserve where the time or equipment necessary for the independent traveler to reach those locations would otherwise be prohibitively lengthy or expensive.
 - They provide education and inspiration related to wilderness resources and values.
 - They assist visitors in exploring the backcountry in areas or by means that require specialized knowledge (e.g., mountaineering, dog mushing).
- Commercial services are provided in a manner that furthers protection, conservation, and preservation when they do all of the following:
 - They teach and follow Leave-No-Trace principles for the sub-arctic wilderness environment.
 - They provide education relevant to preservation of wilderness resources and values.
 - They offer substantial benefits to the protection of the wilderness resources and values of the area.

- Commercial services do not cause unacceptable impacts to park resources or values when they do all of the following:
 - Group size, number of groups, and travel modes are consistent with management area designations and avoid impacts on vegetation, wildlife usage, and cultural resources of the area.
 - Groups follow Leave-No-Trace principles for the sub-arctic wilderness environment.
 - The activities are consistent with management area standards for solitude, natural sounds, and other wilderness characteristics for each management area.

In the park additions and preserve, if a guided commercial activity or non-commercial educational program takes place in an area where the numbers of visitors are limited, the allowable number of parties or visitors participating in the guided activity will be no more than 50% of the total potential use of the area during any visitor season (summer/winter) in order to allow for non-guided uses. In the Old Park, the number of parties or visitors participating in the guided activity will be no more than 25% of the total potential use of the area during any visitor season (summer/winter) where such use is allowed. Among commercial and educational programs, the programs provided directly by the National Park Service and the Murie Science and Learning Center will have priority for available capacity.

To avoid adverse affects to resources, the National Park Service will be conservative in making available guided activities and similar educational programs. When establishing new programs, the NPS will evaluate the impact of the new use before offering the program in additional locations or adding more programs to the same area.

All new commercial services, and both new and existing operators, will be required to meet the criteria listed above. Activities or services not described in this section could be considered only in the southern additions designated as Management Area A.



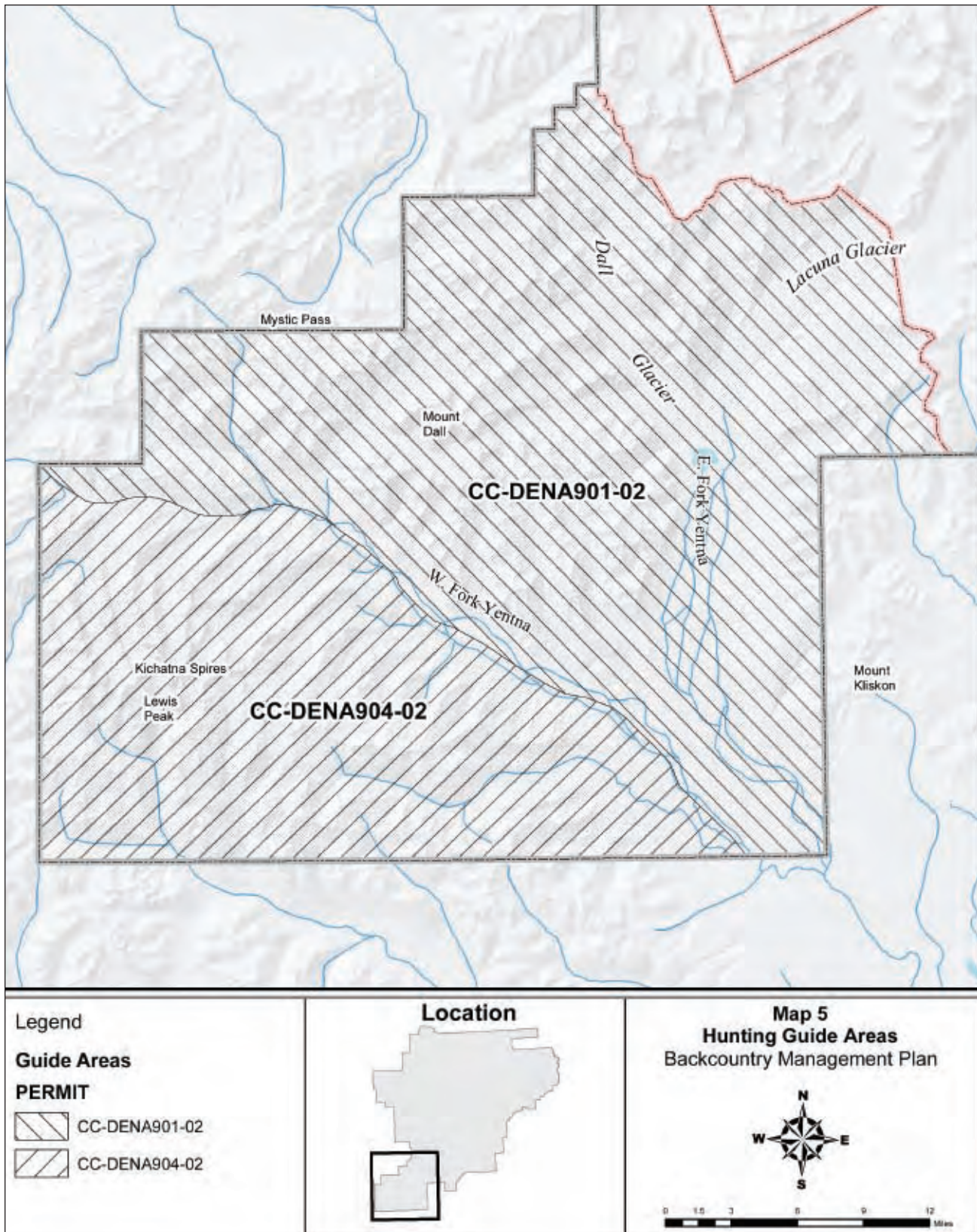
Commercial Airplane Landings

- Air taxi landings could occur throughout the park additions and preserve. To be considered an “air taxi” landing, the majority of passengers on the flight must either be dropped off or picked up from a day trip or overnight stay and passengers do not remain with their airplane while on the ground.
- “Scenic air tour landings” are distinguished by passengers remaining with their airplane while on the ground. Scenic air tour landings will be allowed on glaciers in all areas designated as Management Area A. Scenic air tour landings could also occur at the designated Portals on the Eldridge and Pika Glaciers; however, these areas will remain secondary and less used in accordance with their management area designation. Scenic air tour landings in these two areas will not occur when other landing locations are available and scenic air tour landings will be discouraged when climbers or mountaineers are present. These areas will be prioritized for monitoring and additional actions will be taken if management area standards are approached or exceeded. Scenic air tour landings could occur at Kahiltna Base Camp throughout the year. In all locations, landings for scenic air tours will be restricted to the hours between 9am and 9pm.

Guided Hiking

- Guided day-hiking in the Wonder Lake area and along the McKinley Bar trail will continue as described in the 1997 *Entrance Area and Road Corridor DCP*.
- Additional guided day-hiking could be continued in the western portion of the Old Park between Toklat River and Wonder Lake with access from Kantishna, limited to the same number of groups as at present (determined by average of last five years).
- Guided day-hiking in the Old Park east of Toklat River will be available only on the following entrance area trails:
 - The Rock Creek Trail and Roadside Trail between the Denali Visitor Center and Park Headquarters
 - The Bike Trail and Jonesville Trails between the Nenana River Bridge and the Denali Visitor Center
 - The Nenana River and Triple Lakes trails when planned construction or rehabilitation is complete (see 1997 *Entrance Area and Road Corridor DCP*)
 - The Savage Alpine Trail between Savage Campground and Savage River, only for those commercial groups staying at Savage Campground.
- In the portion of the Kantishna Hills where designated campsites are available, overnight camping by guided groups will be restricted to these campsites.
- Guided day-hiking and overnight backpacking could be considered throughout the park additions and preserve.

Map 5: Hunting Guide Areas



Guided Sport Hunting

The entire southwest Preserve will be divided into two sport-hunting guide areas with the dividing line between areas along the West Fork of the Yentna and through Shellabarger Pass. The change will take place immediately as an amendment to the existing sport-hunting concession contracts. See Map 5.

Other Activities

The following guided activities could continue to be authorized if the criteria described at the beginning of this Commercial Services section are met:

- Guided mountaineering on Mount McKinley and other peaks throughout the glaciated portions of the Alaska Range, (including lowland approaches), in the Old Park, park additions, and preserve
- Dog mushing expeditions in the Old Park, park additions, and preserve
- Winter day- or multi-day trips by ski or snowshoe in the park additions and preserve.

In addition, dog team freight hauling services in the Old Park, park additions, and preserve could continue to be authorized.

Backcountry Facilities

Communication Facilities

Communications facilities will be considered on a case-by-case basis following the minimum requirement/minimum tool process. New structures will be attached to existing structures wherever possible. For administrative purposes, the National Park Service will phase in the use of satellite phones or similar technology in the backcountry to avoid the need for new temporary or permanent communication facilities in backcountry areas.

Trails

The National Park Service will designate Backcountry Hiker areas and (if needed) construct or improve the following trails:

- Some existing social trails within units 41, 42, and 43 in Kantishna, formalizing a trail system in this area
- From Eielson Visitor Center to Gorge Creek
- A loop from the water tower above Wonder Lake Campground up to the bench west of Wonder Lake and return
- From the Mount Healy overlook down a spur ridge to create a loop to the Taiga Trail
- From the west end of Thorofare Bluffs down to the Thorofare River bar.

No other new summer or winter trails will be added besides those identified in the 1997 *Entrance Area and Road Corridor DCP* and the 1997 *South Side Denali DCP*. Elsewhere in the park and preserve, the National Park Service will maintain a “no formal trails” policy.

Park Road

During winter months, snow on one lane of the park road will continue to be packed from the Headquarters gate to Mile 7 to allow maintenance activities that prevent the buildup of ice on the road in this section. Snow will not be removed from the road until necessary to prepare the road for summer season use. This section of the park road will be designated a Backcountry Hiker area during winter months.

Campsites

Up to 5 designated camping areas of 1-3 sites each will be created in conjunction with the Corridor and Backcountry Hiker areas in units 41, 42, and 43 in the Kantishna Hills. These sites will be farther from the park road than the areas commonly used by day-hikers. Food storage and/or sanitation facilities could be placed in the designated campsites.

Shelters and Cabins

The National Park Service will add visitor facilities at Park Headquarters, such as restrooms, plug-ins, and a warming hut, to support winter use. Otherwise, there will be no new facilities besides those already in approved plans.

Information Facilities

The National Park Service, in cooperation with other land management agencies, will operate a visitor contact station in the Cantwell/Broad Pass area. This facility will provide information and registration/permitting for year-round use of the park and preserve's backcountry, with a particular focus on serving the needs of winter recreational visitors on the south side of the Alaska Range.

Administration and Scientific Activities

To establish greater accountability and minimize impact to wilderness resource values throughout the park and preserve, all NPS-authorized administrative and research activity throughout the entire park and preserve backcountry will be subject to the minimum requirement/minimum tool process. When the minimum requirement/minimum tool is used, the potential disruption of wilderness character and the physical resource will be considered and given more weight than economic efficiency and convenience. Appendix E provides a sample tool for determining the minimum requirement/minimum tool.

Information and Education

Consistent with the protection of the park and preserve's wilderness character, information about backcountry travel will generally be provided before visitors enter the backcountry. This will minimize or eliminate the need for signs or other markers in the backcountry itself. Trip planning and safety information will be available at park visitor centers, Alaska Public Lands Information Centers, and at visitor facilities in Denali State Park. This information will also be available through the Internet and print materials that could be distributed nationally and internationally.

The National Park Service and its educational partners will provide wilderness education to all park visitors to assist in their understanding of the wilderness resource values protected in the Denali backcountry. Education will focus on interpreting the wilderness resource values articulated in the Wilderness Management section of this plan. Wilderness education could involve non-personal means in park visitor centers and Alaska Public Lands Information Centers, and also remotely via the Internet and print materials. Wilderness education in the backcountry will be provided entirely through personal services by concession, non-profit, or NPS guides.

Day use and overnight educational programs offered by the National Park Service, the Murie Science and Learning Center, and accredited educational institutions and non-profit organizations operating under a cooperative agreement with the National Park Service could be offered throughout the Old Park, park additions, and preserve. All educational programs taking place in the backcountry will be required to meet the criteria identified under Commercial Services.

Aviation

Within three years, the National Park Service will complete a plan for administrative and research use of aircraft in the wilderness, park additions, and preserve, which includes goals and specific objectives for minimizing helicopter and airplane use; specifies a methodology for accounting for NPS administrative and research air traffic; and provides criteria for determining when the use of aircraft meets the minimum requirement/minimum tool test.

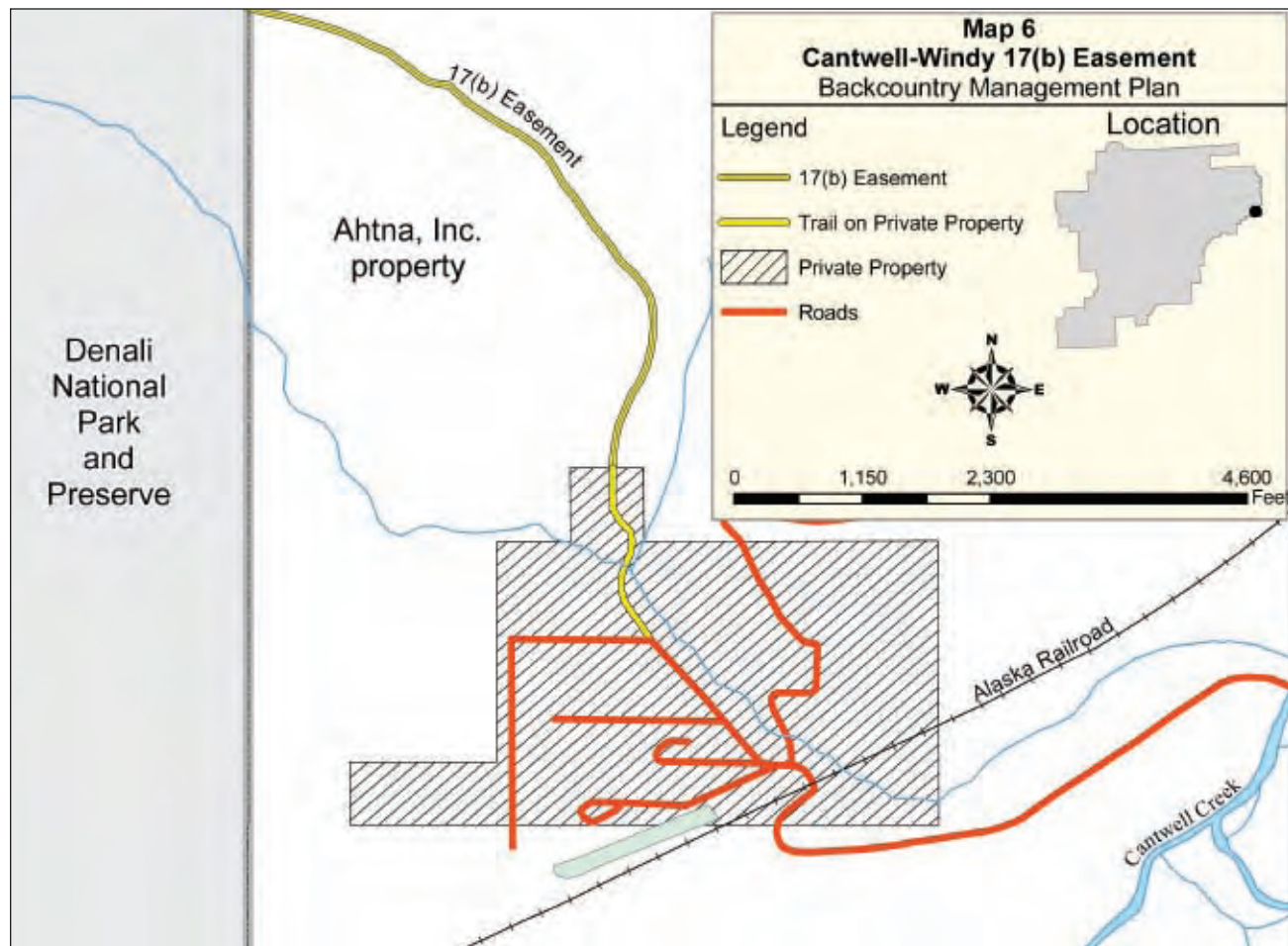
Research and Resource Management

All NPS and external research will require a research permit that will be granted only if the parameters of the project meet the management area standards in the location(s) where the project is proposed. Research and resource management activities of the Alaska Department of Fish and Game will require advance consultation under the Master Memorandum of Understanding between the Department of Fish and Game and the National Park Service.

Administrative Camps

The existing patrol structure and administrative camps on Mount McKinley will be retained. There will be no additional administrative camps in the backcountry.



Map 6: Cantwell-Windy 17(b) Easement

Easements and Boundary Changes

Easements

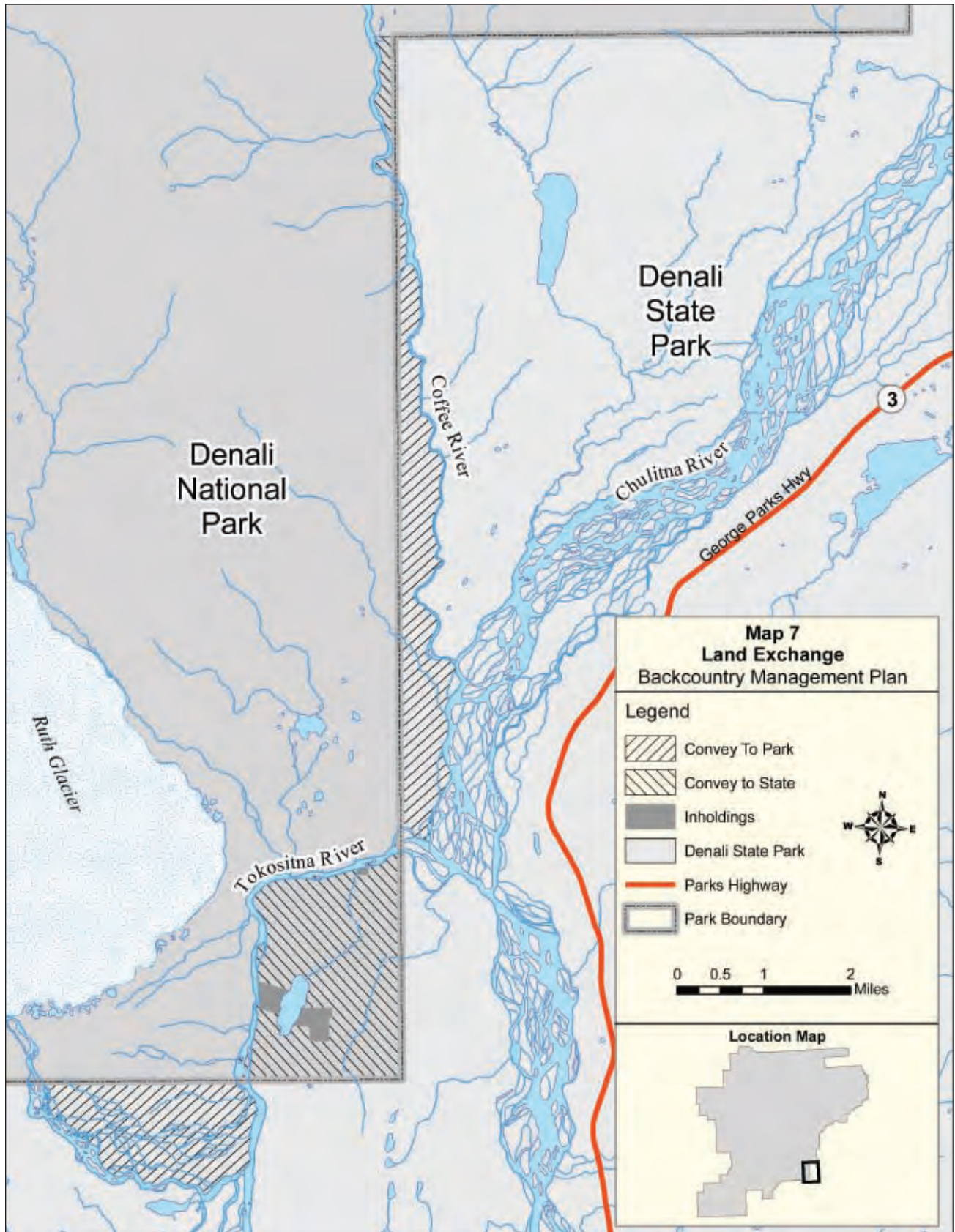
The National Park Service will initiate collaborative action with concerned and affected parties in the Cantwell area to acquire an easement over private lands to gain public access to the existing 17(b) easement (EIN 7a C5, DI, L) that provides a route across Ahtna, Inc. land from Cantwell to the park boundary near Windy Creek. The existing easement is 25 feet wide and allows travel by foot, dogsleds, animals, snowmachines, two- and three-wheeled vehicles, and small all-terrain vehicles. See Map 6.

Land Exchanges

The National Park Service will seek a land exchange with the State of Alaska (similar to a previously proposed exchange of land) that will realign the park boundary with the Tokositna, Coffee, and Ruth Rivers (see Map 7). As a result of the exchange, approximately 3,229 acres of Denali State Park land would be transferred to Denali National Park and Preserve, and approximately 2,822 acres of Denali National Park and Preserve land would be transferred to Denali State Park. Land to be transferred to the State of Alaska surrounds approximately 137 acres of privately owned inholdings.

An additional adjustment will be proposed for the area immediately north of Dutch Creek to provide a boundary that is more identifiable in the field and out of the potential placer mining in that floodplain. Completion of the exchanges and determination of actual boundaries and acreage will depend on the outcome of negotiations with the State of Alaska.

Map 7: Land Exchange



Implementation

The backcountry management plan will be implemented through regulations, step-down plans, commercial service authorizations, construction projects, and other means. Implementation actions and requirements are listed in Table 7. Public involvement and environmental compliance will be completed as necessary for all actions.

The plan will be implemented using adaptive management. Since the park recognizes the need to make decisions on the best available information, it will continue to gather new information, learn from previous efforts, and adapt the plan as necessary. The National Park Service will gather information from visitor registration and surveys, as well as from the monitoring of soundscapes, wildlife, and other resources. Adaptation and change to the plan can be expected as monitoring continues, new scientific data and information is obtained, new tools and equipment are developed, and new opportunities and circumstances arise.

An important part of adaptive management is ongoing monitoring associated with the resource and social conditions described under the Management Areas section above. The National Park Service will monitor for the general condition of the area not the exceptions. When monitoring shows that standards are exceeded or that trends indicate a risk that standards will be exceeded, the National Park Service will act to manage access and use employing the tools listed Table 5.

Another tool used in adaptive management will be the annual backcountry operational management plan, which will be implemented through existing regulations, the Superintendent's Compendium, or additional special regulations if necessary. This operational plan will provide specific guidance for the general actions authorized in the final backcountry management plan, and the guidance will be updated yearly to reflect current information and conditions. Topics addressed will include:

- Permit conditions
- Unit quotas
- Length-of-stay and other restrictions
- Closures
- Operation of registration and permit systems

Table 7: Implementation Actions

Backcountry Implementation Advisory Committee	Charter an advisory committee under the Federal Advisory Committee Act (FACA) to advise the NPS on plan implementation. Subcommittees will address specific issues including monitoring, aircraft overflights, and mitigation for hiking impacts as described in the plan.
Monitoring	Develop and implement a comprehensive monitoring plan for the indicators identified by the plan. The development of the monitoring plan will take place entirely or in part in conjunction with the development of the park's Resource Stewardship Plan and the development of monitoring protocols for the Central Alaska Network's Vital Signs Monitoring Plan.
Regulations	<p>Promulgate the following special regulations in 36 CFR 13.63:</p> <ul style="list-style-type: none"> • Establish group size limits of 6 and 12 where appropriate • Establish seasonal climbing limit on Mount McKinley • Require removal of human waste at certain locations in climbing and mountaineering areas • Prohibit use of power drills for mountaineering activities throughout the park additions and preserve <p>In addition, the NPS will document the need for management action and promulgate regulations if necessary for the following:</p> <ul style="list-style-type: none"> • Required registration for overnight use or winter day use in the southern park additions east of and including the Kahiltna Glacier • Closure of sensitive locations in the Old Park to motorized access
Commercial Services	<p>Issue prospectuses for commercial air taxi and scenic air tour glacier landing services that reflect plan provisions.</p> <p>Revise description for air taxi Incidental Business Permits (IBP) to reflect plan provisions, or use a Commercial Use Authorization when regulations are available.</p> <p>Issue prospectuses for commercial guided hiking in the Kantishna Hills that reflect plan provisions.</p> <p>Develop a commercial visitor service authorization for guided hiking on designated entrance area trails.</p> <p>Revise IBP area to produce individual maps for air taxi, guided day-hiking, guided overnight hiking, and guided mountaineering services per direction in the plan.</p> <p>Amend guided sport hunting operating plans to reflect approved areas.</p>
Backcountry Operations	<p>Obtain funding for additional patrol and visitor services staff to implement plan provisions.</p> <p>Develop backcountry operational plan and annual updates.</p> <p>Study and implement improvements to backcountry registration system, including advance registration procedure for overnight camping in the Kantishna Hills. Include a voluntary process for registering airplane landings in the Old Park.</p> <p>Identify and map winter corridors in the Dunkle Hills area.</p> <p>Purchase satellite phones and implement procedures for patrol use of phones.</p>
Facility Development	<p>Complete plan for Kantishna trail and backcountry campsite development. Obtain funding and construct.</p> <p>Plan and construct other trails identified in this plan.</p> <p>Add winter backcountry support facilities at Headquarters.</p> <p>Plan and construct Broad Pass visitor contact station. This item will require development of agency partnerships, specific definition of scope, and site selection prior to environmental compliance or other action.</p>
Implementation Plans	<p>Complete plan for NPS aviation management.</p> <p>Obtain easement for access to the Cantwell-Windy Creek 17(b) easement. As necessary, develop ancillary facilities such as trailhead and parking.</p>
Land Exchange	Complete land exchange with the State of Alaska.



CONSULTATION & COORDINATION

The National Park Service consulted and coordinated with numerous agencies, organizations, and interested persons in addressing the proposed Backcountry Management Plan and General Management Plan amendment for Denali National Park and Preserve. Individual members of the public and other interested agencies and organizations have had the opportunity to shape this plan from the definition of issues and concerns through the initial development of alternatives, *Draft EIS*, and *Revised Draft EIS*. The following is a brief overview of the extent of public and agency involvement.

Public Involvement

Public Scoping

The National Park Service held scoping meetings within the park and the regional office during fall 1998 and spring 1999. A Notice of Intent (NOI) to prepare an environmental impact statement was published in the *Federal Register* on August 31, 1999. After publishing the Notice of Intent, the National Park Service hosted public scoping meetings in Anchorage, Fairbanks, Talkeetna/Trapper Creek, and McKinley Village to define issues and impact topics to address in the plan. Approximately 150 people attended these meetings and an additional 65 written comments were received.

Newsletter

As a result of these scoping efforts, the NPS issued in January 2001 the Special Winter 2001 Edition of the *Denali Dispatch* (Volume 6, Issue #4) to about 2,000 addresses on the park mailing list. This document described the primary activities and a range of alternatives to be evaluated in the environmental impact statement. (Recipients included those receiving the *Draft Backcountry Management Plan and EIS*—see list at the end of this section).

Open Houses – Alternatives Development

The National Park Service held open house meetings in Anchorage, Fairbanks, Talkeetna/Trapper Creek, Cantwell, and Healy during the first two weeks of February 2001 to help fine-tune the alternatives and impact topics.

Open Houses – Draft Plan and EIS Review

Upon release of the *Draft Backcountry Management Plan and EIS* in February 2003, the National Park Service held a series of informational workshops in Anchorage, Wasilla, Talkeetna/Trapper Creek, Cantwell, Healy, and Fairbanks to explain the plan so members of the public will be better equipped to respond in public comment.

Public Comment on Draft Plan

The public comment period on the draft plan was open for 75 days from February 25 to May 7, 2003, and then extended at public request to May 30, 2003. In April, public hearings were held in Anchorage, Wasilla, Talkeetna/Trapper Creek, Cantwell, Healy, and Fairbanks. The National Park Service received 9,370 comments. These comments are summarized and responses to substantive comments provided in Appendix A of the *Revised Draft EIS*. As a result of the comments, the National Park Service decided to revise the draft plan and solicit additional public comment before publishing a final plan.

Public Comment on Revised Draft Plan

A Notice of Availability for the *Revised Draft EIS* was published in the Federal Register on April 26, 2005, and public comment was accepted through July 15, 2005. National Park Service staff received 15,198 comments. See Chapter 6 for a summary and analysis of these comments and the NPS responses to substantive comments. Public hearings on the *Revised Draft EIS* were held during June, 2005, in Anchorage, Talkeetna/Trapper Creek, Cantwell, Healy, and Fairbanks.



Consultation With Federal Agencies

U.S. Fish and Wildlife Service

Section 7 of the Endangered Species Act, as amended, prohibits federal agencies such as the National Park Service from implementing any action that is likely to jeopardize the continued existence of a federally protected (i.e., endangered, threatened) species. Further, the act requires that the National Park Service consult with the U.S. Fish and Wildlife Service on any action it authorizes, funds, or executes that could potentially affect a protected species or its designated critical habitat.

To help meet its responsibilities under the act, the National Park Service has consulted with the U.S. Fish and Wildlife Service to identify those listed plant and animal species that may inhabit the backcountry area. On July 17, 2000, Superintendent Stephen P. Martin sent a letter to Ann Rappaport, Ecological Services and Endangered Species, requesting information on federally endangered or threatened plant and animal species in Denali National Park and Preserve for the backcountry management plan. On July 27, 2000, Arthur E. Davenport, Endangered Species Biologist, indicated in his letter that the U. S. Fish and Wildlife Service had no endangered or threatened plant and animal species occurring within the area of the proposed new backcountry management plan for the park. Copies of the correspondence were included in full in Appendix D of the original *Draft Backcountry Management Plan and EIS* (NPS 2003d).

In addition to this communication, National Park Service planning staff met with counterparts in the Alaska Region of the U.S. Fish and Wildlife Service on May 13, 2004, to discuss the draft plan.

Bureau of Land Management

The National Park Service held discussions with Bureau of Land Management staff, Glenallen Field Office, and submitted written comments regarding the East Alaska Resource Management Plan (EARMP). The NPS comments sought coordination between the EARMP and the backcountry management plan on regional recreation opportunities, and particularly for combining efforts on the proposed visitor contact station in the Broad Pass/Cantwell area.

Denali Subsistence Resources Commission

Several presentations have been made to the Denali Subsistence Resources Commission, which has maintained an active interest in the plan because of potential conflicts between subsistence users and recreational users in the park additions and preserve. Presentations have occurred at the April and October meetings in 2001, February meeting in 2002, March meeting in 2004, and June meeting in 2005. The Commission passed formal motions regarding both the original *Draft EIS* and the *Revised Draft EIS*. The motions and commission discussion have consistently called for recognizing a subsistence priority over recreational uses in areas where subsistence use occurs, zoning the southern park additions between Cantwell and the Bull River to protect subsistence activities, and providing more guidance on the resolution of conflicts between subsistence and recreational use. The complete motions regarding the *Revised Draft EIS* and the NPS responses appear in the following chapter of this document, Chapter 6: Public Comments and Response.

Consultation with State and Local Governments

State Of Alaska

The planning team shared a draft copy of the affected environment section of the *Draft EIS* with the State of Alaska during winter 2000-2001 with a 60-day comment period. The Office of the Governor in Anchorage sent a comment letter to the park on April 20, 2001, along with an edited electronic version of the affected environment section. The planning team incorporated most of the state's suggestions. Suggested comments that were not incorporated into the draft plan were discussed with the Division of Governmental Coordination during fall 2001. The National Park Service provided the State of Alaska with a copy of the internal review draft backcountry management plan on January 18, 2002. The State provided verbal comments in a meeting on July 26, 2002.

During the comment period for the draft plan, the State submitted extensive comments that are published in Appendix A of the *Revised Draft EIS* with responses. The National Park Service involved the State extensively in the process of crafting the revised draft plan, holding 10 meetings with representatives of the Office of the Governor, Department of Natural Resources, and Department of Fish and Game between December, 2003, and December, 2004. The State also participated in internal review of the revised draft plan during November 2004. The planning team met with the State during July and September 2005 to discuss the State's comments on the Revised Draft EIS and potential NPS responses to them, and the State was included in the internal review of the *Final EIS* during late November and early December 2005.

Alaska State Historic Preservation Office and the Western Office of the Advisory Council on Historic Preservation

The National Park Service has consulted with the Alaska State Historic Preservation Office and the Western Office of the Advisory Council on Historic Preservation since initiating this project. An advance copy of the document was provided for their review. A copy of the *Draft Backcountry Management Plan and EIS* was sent to both of these offices in order to initiate and plan for coordination survey, eligibility, effect, and mitigation of possible cultural resources in the proposed project areas early in the planning process. Copies of correspondence were included in Appendix D of the original *Draft Backcountry Management Plan* (NPS 2003d). All implementation actions that could affect historic properties as defined under the National Historic Preservation Act and the 1995 Nationwide Programmatic Agreement will be evaluated through consultation with the state historic preservation officer. These actions include, but are not limited to, proposed changes to historic buildings or districts and ground-disturbing activities.



Consultation with Native Tribal Governments

The National Park Service sent copies of the draft plan and letters requesting government-to-government consultation to six affected Native tribal governments. A meeting with the Nenana Native Council was held in summer of 2003 to discuss the backcountry management plan and other issues. These Native tribal governments were also provided with a copy of the *Revised Draft EIS* in April 2005.

Additional Consultation

In addition to the publicized public involvement opportunities and consultation with public agencies, the National Park Service has sought comments and responded to requests for meetings, discussion, or informational presentations with a wide variety of organizations throughout the process of preparing the original and revised draft of the plan. In winter and spring 2002, the National Park Service held collaborative planning workshops in Anchorage and Talkeetna to discuss alternatives and issues associated with climbing and mountaineering, snowmachine use, and airplane use. Park staff frequently met with snowmachine groups, air taxi operators, environmental groups, inholders, subsistence users, and members of the travel and tourism industry to provide updates and solicit ideas and information.



PUBLIC COMMENT

Characterization Of Public Comments Received on the Revised Draft

National Park Service staff at Denali National Park and Preserve received comments from 15,198 individuals, organizations, and agencies on the Revised Draft Backcountry Management Plan. This total includes both written comments and verbal comments made during five public hearings held in Anchorage, upper Susitna Valley (Talkeetna/Trapper Creek), Cantwell, Healy, and Fairbanks. Comments were received from agencies, organizations, and individuals. Comments from individuals included verbal testimony, personally written letters or e-mail messages, and form letters originated by organizations and signed by members or supporters. The number of comments received from each source is as follows:

Agencies	4
Organizations	21
Individuals	15,173
<i>Public Hearing Testimony</i>	13
<i>Non-Form Comments</i>	469
<i>Form Letters</i>	14,691
TOTAL Comments	15,198

Some individuals and organizations provided testimony at the public hearings, and they also submitted written comments. Some individuals also submitted more than one written comment. In these instances, park staff consolidated multiple comments from one source to preserve the entire substance of the comments, but counted each individual only once for tallying purposes.

Individual Comments

Comments were submitted from every state in the United States, plus the District of Columbia, two U.S. territories, and 15 foreign countries.

Local	76
Alaska	178
United States	14,811
International	64
Unknown	44

“Local” includes residence addresses between Willow and Nenana along the Parks Highway and its spur roads as well as the Bush communities of Lake Minchumina, Telida, Nikolai, and Skwentna. “Alaska” includes all other addresses in the state of Alaska excluding those covered under “Local.” “United States” includes all residence addresses within the U.S. and its territories excluding Alaska.

“International” includes all residence addresses outside the U.S. “Unknown” identifies those letters for which an address is not known, generally because the individuals sent an e-mail message and did not include address information.

Most individuals expressed a preference for one of the alternatives although there were a substantial number that commented only on specific issues or requested a modification even in the alternative they preferred. General preferences by the location of residence address are indicated in the table below.

Table 8: Individual Comments by Residence and Alternative Preference

	No Alt Selected	1	2	3	4	5	People for Parks
Local	22	1	42	0	2	0	9
Alaska	34	0	18	1	6	0	119
United States	131	0	17	4	2	0	14,657
International	0	0	1	0	0	0	63
Unknown	22	0	7	0	0	0	15
TOTAL INDIVIDUAL COMMENTS	209	1	85	5	10	0	14,863

Of those 209 individuals who did not indicate a preference for a particular alternative, 166 individuals asked the NPS to protect wilderness character. Most of these comments specifically asked the NPS to ban or restrict snowmachine use and aircraft landings and/or aircraft overflights. Other common requests from these comment letters included protection of wildlife and natural soundscapes, designation of Wilderness, and excluding recreational snowmachine use from the definition of “traditional activities.” Twenty-four individuals asked the NPS to not restrict aircraft landings or ban flightseeing in the park.

All of the 14,691 form letters plus 172 of the non-form letters supported the People for Parks Alternative, which is described below.

Organizations

Twenty-one organizations submitted detailed comments covering the entire range of issues covered in the plan. Most indicated an alternative preferred by that organization, although almost all suggested considerable modifications. The organization and these general preferences are indicated in Table 9

A coalition of conservation organizations advanced the People for Parks Alternative. The main tenets of this alternative were the following:

- Use the precautionary principle to protect park resources before resource impacts occur
- Emphasize a quality visitor experience that includes intangible values
- Determine funding and details for the monitoring program before adoption of the plan
- Extend the definition of “traditional activities” used for the Old Park to the park additions and do not authorize recreational snowmobiling
- Complete the wilderness recommendation to Congress.

This alternative also requested restrictions on commercial scenic air tours similar to those proposed in Alternative 4 but excluding the Pika and Eldridge Glaciers from all scenic air tour landings.

Table 9: Organization Comments by Alternative Preference

	Organization	Preferred Alternative
1	Aircraft Owners and Pilots Association	5 for aviation
2	Alaska Airmen's Association	5
3	Alaska Center for the Environment	People for Parks
4	Alaska Quiet Rights Coalition	People for Parks
5	Alaska Outdoor Access Alliance, Alaska Outdoor Council	1
6	Alaska Professional Hunters Association	5 for guided services
7	Alaska Travel Industry Association	4
8	American Alpine Club	3
9	Bluewater Network	People for Parks
10	Californians for Western Wilderness	People for Parks
11	Denali Citizens Council	Elements of 2/3/People for Parks
12	Fairbanks Convention and Visitors Bureau	No preference—provided information on the visitor industry
13	Great Old Broads for Wilderness	People for Parks
14	International Snowmobile Manufacturers Association	5
15	National Parks Conservation Association	People for Parks
16	Natural Resources Defense Council	People for Parks
17	Northern Alaska Environmental Center	People for Parks
18	The Ecotopian Society	People for Parks
19	The Wilderness Society	People for Parks
20	Trustees for Alaska	People for Parks
21	Wilderness Watch – Alaska	Oppose preferred—supports use limits to protect wilderness resource values

Agencies

In addition to the comments from individuals and organizations, the NPS received comments from the State of Alaska, the U.S. Environmental Protection Agency (EPA), the US Air Force, and the Denali Subsistence Resource Commission.

The State of Alaska letter provided detailed comments on various issues, but its principle concern was whether NPS was seeking to manage areas outside of the Old Park “as wilderness.” The letter objected to State of Alaska actions being subject to the “minimum requirement/minimum tool” analysis outside of designated wilderness.

The U.S. EPA expressed concern about environmental impacts from snowmachine use and trail construction, and about the park’s ability to monitor indicators proposed in the plan. It did not express a preference for a particular alternative.

The U.S. Air Force comment asked NPS to correct factual data concerning the Susitna Military Operations Area. The Air Force did not express a preference for a particular alternative.

The Denali Subsistence Resource Commission considered the plan at its meeting on June 28, 2005, and passed three motions concerning the need for subsistence uses to be given a higher priority in planning and asking that the NPS better identify how it will address conflicts between subsistence and recreational uses.



SELECTED APPENDICES

Appendix D: Backcountry Units and Requirements

The 1976 *Backcountry Management Plan* for Mt. McKinley National Park established a system of backcountry units, associated use limits, a mandatory permit system, and made other administrative decisions such as the prohibition of open fires and pets within the park backcountry. Notice of the permit and use limit decisions was provided in the Federal Register on June 11, 1976 in volume 41, number 114. Subsequent regulations were promulgated at 36 CFR § 13.63 (b) that allowed camping in accordance with the Backcountry Management Plan.

Since that time, as part of 1986 *General Management Plan* and other administrative actions necessary to respond to emerging issues, operational revisions to this 1976 plan have occurred such as changes in unit boundaries, the unit numbering system, and the adjustment of a few overnight use limits within the subset of units where a backcountry camping permit is currently required. These changes have been incorporated as revisions to the original 1976 plan and continue to be implemented through existing regulations and, when appropriate, the Superintendent's Compendium for Denali National Park and Preserve.

Map 8 shows the system of backcountry units that is currently in use at Denali National Park and Preserve. Table 10 shows how the revised existing backcountry management plan is being currently implemented with respect to backcountry camping permits, Bear Resistant Food Container use, and overnight camping limits.

Map D-1: Backcountry Units

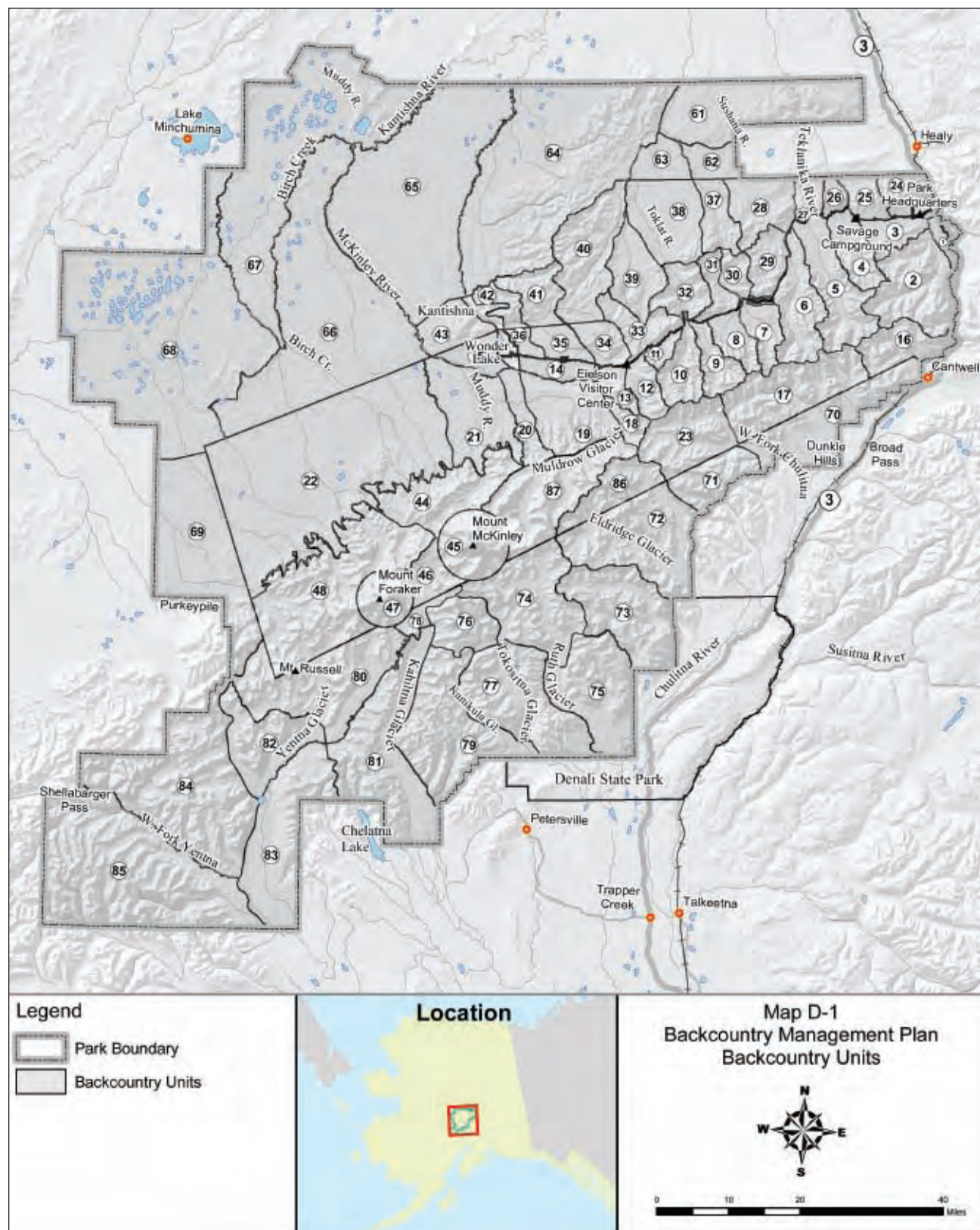


Table 10: Permit and Bear Resistant Food Container Requirements – Denali National Park and Preserve

Unit Number	Unit Name	Backcountry Camping Permit	Bear Resistant Food Container	Overnight Limit (# of People)
1	Triple Lakes	Required	Required	12
2	Riley Creek	Required	Required	12
3	Jenny Creek	Required	Required	4
4	Upper Savage	Required	Required	6
5	Upper Sanctuary	Required	Required	6
6	Upper Teklanika	Required	Required	6
7	Upper East Fork	Required	Required	4
8	Polychrome Glaciers	Required	Required	6
9	East Branch Upper Toklat	Required	Required	6
10	West Branch Upper Toklat	Required	Required	6
11	Stony Dome	Required	Required	2
12	Sunset/Sunrise Glaciers	Required	Required	4
13	Mount Eielson	Required	Required	4
14	McKinley Bar East	Required	Required	4
15	McKinley Bar West	Required	Required	4
16	Windy Creek	Required	Required	8
17	Foggy and Easy Pass	Required	Required	8
18	Upper Glacier Creek	Required	Required	4
19	Pirate Creek	Required	Required	4
20	McGonagall Pass	Required	Required	4
21	Muddy River	Required	Required	8
22	Upper Foraker	Required	----	----
23	West Fork Glacier	Required	Required	8
24	Mount Healy	Required	Required	4
25	Healy Ridge	Required	Required	4
26	Primrose Ridge	Required	Required	4
27	Mount Wright	Required	Required	4
28	Sushana River	Required	Required	8
29	Igloo Mountain	Required	Required	4
30	Tributary Creek	Required	Required	4
31	Polychrome Mountain	Required	Required	6
32	Middle Toklat	Required	Required	4
33	Stony Hill	Required	Required	4
34	Mount Galen	Required	Required	4
35	Moose Creek	Required	Required	4
36	Jumbo Creek	Required	Required	2
37	Lower East Fork	Required	Required	6
38	Lower Toklat	Required	Required	6

Continued next page

Table 10 (continued)

Unit Number	Unit Name	Backcountry Camping Permit	Bear Resistant Food Container	Overnight Limit (# of People)
39	Stony Creek	Required	Required	4
40	Clearwater Fork	Required	Required	12
41	Spruce Peak	Required	Required	12
42	Eureka Creek	Required	Required	12
43	Eldorado Creek	Required	Required	12
44	Peters Glacier	Required	----	----
45	Mount McKinley	Required	----	----
46	Upper Kahiltna	Required	----	----
47	Mount Foraker	Required	----	----
48	Herron Glacier	Required	----	----
61	Stampede	----	----	----
62	Southeast Stampede	----	----	----
63	Southwest Stampede	----	----	----
64	Kantishna Hills	----	----	----
65	Moose - McKinley	----	----	----
66	McKinley - Birch	----	----	----
67	Birch - Foraker Preserve	----	----	----
68	Herron - Highpower Preserve	----	----	----
69	Swift Fork	----	----	----
70	Bull River	----	----	----
71	Ohio Creek	----	----	----
72	Eldridge Glacier	----	----	----
73	Buckskin Glacier	----	----	----
74	Upper Ruth	----	----	----
75	Lower Ruth	----	----	----
76	Mount Hunter	----	----	----
77	Tokositna Glacier	----	----	----
78	Middle Kahiltna	----	----	----
79	Little Switzerland	----	----	----
80	Upper Yentna-Lacuna	----	----	----
81	Lower Kahiltna	----	----	----
82	Dall-Yentna Preserve	----	----	----
83	Yentna River Preserve	----	----	----
84	Mount Dall Preserve	----	----	----
85	Kichatna Preserve	----	----	----
86	Mount Mather	Required	----	----
87	Mount Brooks	Required	----	----

Appendix F: Cost Analysis

The following cost analysis is derived from management actions and predicted impacts on park operations as described in chapters 2 and 4.

Table 11: Cost Analysis

OPERATIONS - Additional Annual Cost over Current Program				
	ALTERNATIVE			
Cost Component	2	3	4*	5
Visitor Information	209,000	319,000	438,000	438,000
Field Operations/Enforcement	-298,000	192,000	445,000	763,000
Aerial Patrol/Monitoring	40,000	54,000	72,000	90,000
Planning/Commercial Use Mgt.	41,000	41,000	124,000	166,000
Facility Maintenance	0	218,000	253,000	379,000
Research and Monitoring	246,000	246,000	655,000	838,000
Total	238,000	1,070,000	1,987,000	2,674,000
CONSTRUCTION - One-time Costs Including Equipment and Materials				
	ALTERNATIVE			
Building Facilities	2	3	4*	5
Broad Pass visitor contact station	0	800,000	800,000	800,000
Public use cabins	0	0	0	150,000
Trail Facilities	2	3	4*	5
Hiking trails	0	250,000	300,000	600,000
Extend winter multi use trail: Mile 7 to Savage	0	0	0	100,000
Total	0	1,050,000	1,100,000	1,650,000

* Preferred alternative

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